DOCUMENT RESUME

ED 377 774 HE 027 958

AUTHOR Hartog, Sandra B., Ed.; Levine, Judith R., Ed.
TITLE Teaching of Psychology: Ideas and Innovations. Proceedings of the Annual Conference on Undergraduate Teaching of Psychology (8th, Ellenville, New York, March 16-18, 1994).
INSTITUTION State Univ. of New York, Farmingdale. Coll. of Technology.
PUB DATE 18 Mar 94
NOTE 248p.
PUB TYPE Collected Works - Conference Proceedings (021)

EDRS PRICE MF01/PC10 Plus Postage.
DESCRIPTORS Active Learning; Aggression; Art; Athletics; Classroom Techniques; Cognitive Psychology; College Faculty; *College Instruction; College Students; Construct Validity; Cooperative Learning; Evaluation; Higher Education; *Instructional Innovation; Learning Strategies; Personality; Privacy; *Psychology; Social Psychology; Student Participation; Teaching Methods

ABSTRACT

This publications presents 20 papers from a conference on innovations in teaching psychology at the college level along with a conference program that lists and describes all presentations. The papers are "They Can't Learn When They Don't Know How: Teaching Statistics Using a Learning to Learn Model" (Beverly Rolker-Dolinsky and Donna Qualters); "Dare We ask Them What They Learned?" (Linda Dunlap); "Relating Familiar Material to new Material: One Form of Active Learning" (Judith Luis); "A Reactionary View of Psychology 101" (Barbara Gentile and Benjamin Miller); "Getting Students Involved Through a 'Curriculum of Questions'" (Ann Saltzman); "Four Activities to Enhance Student Learning and Involvement in an Interdisciplinary Course in Psychology and Art" (J. Craig Clarke and Kent Kimmel); "Sports Psychology--An Applied Theoretical Approach" (Robert Cavalier); "Personality, Teaching Style, and Learning Style" (Francis Colavita); "Use of Learning Groups for Active Learning" (David Wheeler); "A Multimedia Course in the Psychology of the Arts" (Donald Polzella and Gregory Brake); "Construct Validity and the Naive Student" (Patricia Ditunno); "Requiring Students to Think of Examples Can Increase Their Involvement" (Gabriele Sweidel); "Acquisition of Applied Skills Via Active Learning" (Holiday Adair); "Three Laboratory Exercises in Cognitive Psychology" (Anita Meehan); "Privacy Issues in Assignments" (Susan Cloninger); "Seminar in Aggression" (Matthew Margres and Mark Margres); "Psychology Majors Assessment of Their Undergraduate Experience: 1973 to 1993 SUC at Buffalo" (John Morganti et al.); "Cooperation in Operation: Examples of Successful Cooperative Learning Lessons from Four Areas of Psychology" (Susan Marell and Libby Ortiz); "Knowing Thyself: Teaching a Course on Social Psychological Perspectives on Self-Reflection" (Dana Dunn); and "How Students Perceive Classroom Exercises in a Social Psychology Course" (Karen O'Quin). Some papers contain survey instruments and references. (JB)

ED 377 774

Teaching of Psychology: Ideas and Innovations

Proceedings of the Eighth Annual Conference

March 16, 17, 18, 1994

Sandra B. Hartog and Judith R. Levine, Editors

HE027 958

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Judith R. Levine

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Table of Contents

Introduction 1

Conference Program 2

They Can't Learn When They Don't Know How: Teaching Statistics in a Learning to Learn Model 21
Beverly Rolker-Dolinsky & Donna Qualters

Dare We Ask Them What They Learned? 29
Linda Dunlap

Relating Familiar Material to New Material: One Form of Active Learning 36
Judith Luis

A Reactionary View of Psychology 101 42
Barbara Gentile & Ben Miller

Getting Students Involved Through a "Curriculum of Questions" 50
Ann Saltzman

Four Activities Used to Enhance Student Learning and Involvement in an Interdisciplinary Course in Psychology and Art 68
J. Craig Clarke & Kent Kimmel

Sports Psychology -- An Applied Theoretical Approach 81
Robert Cavalier & Dermot McGrane

Personality, Teaching Style, and Learning Style 83
Francis Colavita

Use of Learning Groups for Active Learning 86
David Wheeler

A Multimedia Course in the Psychology of the Arts 92
Donald Polzella

Construct Validity and the Naive Student 100
Patricia Ditunno

Requiring Students to Think of Examples Can Increase Their Involvement 110
Gabriele Sweidel

Acquisition of Applied Skills Via Active Learning in the Classroom 114
Holiday Adair

Three Laboratory Exercises in Cognitive Psychology 117
Anita Meehan

Privacy Issues in Assignments 137
Susan Cloninger

Seminar in Aggression: An Interdisciplinary Review 154
Matthew Margres & Mark Margres

Psychology Majors Assessment of Their Undergraduate Experience: 1973 to 1993 SUC at Buffalo Graduates 162
John Morganti, Michael Zborowski, & Robert Delprino

Cooperation in Operation: Examples of Successful Cooperative Learning Lessons from Four Areas of Psychology 177
Susan Marell & Libby Ortiz

Knowing Thyself: Teaching a Course on Social Psychological Perspectives on Self-Reflection 197
Dana Dunn

How Students Perceive Classroom Exercise in a Social Psychology Course 223
Karen O'Quin

Introduction

The Eight Annual Conference on Undergraduate Teaching of Psychology: Ideas and Innovations was held on March 16, 17, and 18 1994 at the Nevele Hotel in Ellenville, New York. The conference was sponsored by the Psychology Department of SUNY Farmingdale.

The over 100 conference attendees had 54 lectures, workshops and poster presentations from which to choose, in addition to an array of publishers' exhibits to visit. There were also keynote addresses from Karen Huffman and Zick Rubin. Twenty of the presentations are included in these conference proceedings.

The success of this conference was due to the dedicated work of many individuals. We offer sincere thanks and appreciation to the following people for their efforts on behalf of the conference: Gene Indenbaum of the Psychology Department at SUNY Farmingdale for his conscientiousness in handling the local arrangements, overseeing operations at the hotel, and providing invaluable advertisement and energy; David Griesé of the Psychology Department at SUNY Farmingdale for his perseverance in securing our keynote speakers and publishers; Barbara Sarringer of the Psychology Department at SUNY Farmingdale for her excellence in providing much needed administrative and secretarial support; and all those who served on the Subcommittee on Paper Selection.

Sandra B. Hartog, Ph.D.
Judith R. Levine, Ph.D.

CONFERENCE PROGRAM

the 8th annual conference on undergraduate

TEACHING of PSYCHOLOGY:

IDEAS & INNOVATIONS

presented by

The Psychology Department

of

SUNY COLLEGE OF TECHNOLOGY AT FARMINGDALE, NY

Wednesday, March 16 - Friday, March 18

1994

PROGRAM

WEDNESDAY March 16, 1994

Registration 2-2:40

Session 1 2:45 - 3:45

Rm 1 Presider: Carol Ann Dalto, Merrimack College, MA

Workshop: Psychodrama Goes to School
Daniel Tomasulo, Brookdale Community College, NJ

There is much more to "role playing" than learning how to set scenes for enactments. Deepen the involvement of your students and use psychodramatic and sociodramatic techniques.

Rm 2 Presider: Linda Dunlap, Marist College, NY

50 Ways to Make A's on Research Papers in Psychology
Gail Gibson & Terrence Philips, Alabama A & M University, AL

We will present a 15 page library research guide that we developed for students. Our "cute" title reflects the user friendly, informal manner in which we have tried to appeal to students. In our presentation we will discuss the guide, how it is presented to students, and students' responses to it.

Role-playing Personality Constructs: A Learning Strategy
Drew Velting, SUNY Stony Brook, NY

Role-playing was introduced to students enrolled in a summer session course as a method of learning personality theory and related issues. Following lecture and discussion of a particular topic, small groups were asked to enact a related personality construct for the benefit of the class. Audience feedback was encouraged. Student-improvised portrayals appear to facilitate social interaction and promote greater personal investment in learning.

Rm 3 Presider: Kathleen Harring, Muhlenberg College, PA

Tutoring Self-Regulated Learning Strategies: Schemata Development and Transfer
John Chan, Dominican College, NY

A study of a self-regulated textbook learning program which was constructed on the basis of recent developments in cognitive research will be presented. A tutorial training paradigm was shown to be effective in inducing new learning schemata and their transfer.

Attitude and Achievement in Traditional, Computer Supported, and Mixed Techniques Psychological Statistics Classes: A Second Look
Zandra Gratz, Gloria Volpe, & Bonnie Kind, Kean College, NJ

The impact of computer supported data analysis in introductory statistic courses was examined. Classes varied by computer use and included computer only, calculator only, and combined computer and calculator levels. The efficacy of a manual (revised 6/93), developed to facilitate independent use of SPSS/PC was explored.

Session 2 4:00 - 5:30

Rm 1 Presider: Zandra Gratz, Kean College, NJ

Workshop: How Can I Learn When I Don't Know How: Team Teaching in a Learning to Learn Model
Beverly Rolker-Dolinsky & Donna Qualters, Endicott College, MA

Do students become involved in learning if they're not sure how to learn the material? Endicott College has begun a learning experiment in an upper division statistics course in an effort to provide a balance of both content and learning skills to students. The purpose of this workshop is to demonstrate the process used between content faculty and learning specialists that allowed an integrated course to develop.

Rm 2 Presider: Sandra Hartog, SUNY College of Technology at Farmingdale, NY

Dare We Ask Them What They Learned?
Linda Dunlap, Marist College, NY

We assume that students benefit from the learning opportunities we make available in our courses. Student feedback on all aspect of the course need to occur. This presentation presents ideas on how to receive feedback on lectures, group activities, assignments, and tests.

Relating Familiar Material to New Material: One Form of Active Learning
Judith Luis, St John's University, NY

Teachers interested in one form of active learning should begin where the learners are. It is then possible to lead the learners into active involvement with the material and allow them the opportunity to link what they already know to what is being learned. The theoretical framework for this is reviewed and several examples are provided.

Encouraging Students to Apply Academic Psychology to Their Own Lives
Steven Gilbert, SUNY Oneonta, NY

Two writing assignments are described that help students find personal relevance in academic psychology. In one, students must write a personal anecdote, review an area of psychology, and then relate the two. In the second, students must interview a parent (or other relative), and then apply course concepts to the interview.

Rm 3 Presider: Drew Velting, SUNY at Stony Brook, NY

A Reactionary View of Psychology 101
Barbara Gentile & Ben Miller, Simmons College, MA

Students often do not understand or accept the need to begin the study of psychology with an introductory course. In addition, students' view of the field as a helping profession rather than as a broad scientific enterprise may strongly influence their first encounter with psychology. Considering the high stakes, the introductory course needs to challenge students' narrow preconceptions by presenting psychology as a method of inquiry rather than a collection of facts and theories.

Socratic Teaching of a 120 Student Course
Joshua Duntley & Lawrence Shaffer, SUNY Plattsburgh, NY

A large, 120 student lecture course in Survey of Human Development is redesigned to consist largely of Socratic questioning. At the same time reading material for the course is changed from textbooks to journal articles and examinations are made more conceptual. Numerical comparisons demonstrate that this change results in considerably improved student learning.

Getting Students Involved Through a "Curriculum of Questions"
Ann Saltzman, Drew University, NJ

This paper reports on an "experiment" with a "curriculum of questions" in a Seminar in Social Psychology. Based on post-course evaluations, students derived four benefits from this curriculum: (1) it helped them process the material in a more active, critical and personal manner; (2) it forced them to keep up with the reading; (3) it prepared them for class discussion; and (4) the feedback which they received was instructive and personally reinforcing.

Reception 6:00 - 7:00

RECEPTION COURTESY OF HOUGHTON-MIFFLIN

Dinner 7:00

Invited Speaker: Karen Huffman

Professor Backlash:
Active Learning, Critical Thinking, Gender, and Cultural Diversity
When Do I Get To Teach Psychology?

INVITED ADDRESS COURTESY OF JOHN WILEY & SONS

Evening Hospitality Suite

THURSDAY March 17, 1994

Breakfast 7:30 - 9:00

Session 3 9:00 - 10:30

Rm 1 Presider: Lori Van Wallendael, University of North Carolina at Charlotte, NC

Workshop*: *Undergraduate Teaching Modules for the Human Sciences
Eugene Galanter & Robert Pollack, Columbia University, NY

The modular design of an introductory curriculum in the human sciences from biology to sociology is described. In addition to the usual multi-hyper-media techniques, the modules offer the option of conducting real experiments and analyzing real data. Peer interaction between the experimentalists and field workers, and the students who have chosen to forgo this advanced work, helps both those who plan to major and those simply fulfilling their science requirement.

Rm 2 Presider: John Morganti, SUNY College at Buffalo, NY

Four Activities Used to Enhance Student Learning and Involvement in an Interdisciplinary Course in Psychology and Art
J. Craig Clarke & Kent Kimmel, Salisbury State University, MD

The four activities used to enhance student learning and involvement in a team-taught interdisciplinary course in psychology and art included (a) students' creation and evaluation of art works intended to express particular emotions, (b) in-class experiments using painting reproductions to support discussion of research methodology and cognitive issues, (c) visiting and viewing and art gallery "through someone else's eyes", and (d) various student presentations emphasizing class involvement.

Sport Psychology -- An Applied Theoretical Approach
Robert Cavalier & Dermot McGrane, Elmira College, NY

A 6 week course brought sport psychology theory onto the playing field through the use of self assessment instruments. The theories developed in the classroom were used to construct several self assessment instruments whereby students could examine the application of theory to their personal experiences as players and team members. The self assessment instrument served the dual purpose of describing and clarifying theory and providing a means to investigate how theory works in the field.

The Dramaturgical Approach to Psychology: A Teaching Experiment

Karl Scheibe, Wesleyan University, CT

The dramaturgical approach to psychology explores the material of psychology directly, with texts serving only a supplementary function. The object is to engage in an organized, intense, and disciplined study of the material of psychology which the participants in the course bring to the room. The instructor acts as a director, not supplying the content of the course, but placing students in a position to discover and understand the content themselves. The content is a series of psychological topics which could be dramatically conceived, displayed, demonstrated, and explored.

Rm 3 Presider: Anita Meehan, Kutztown University, PA

Personality, Teaching Style, and Learning Style
Francis Colavita, University of Pittsburgh, PA

Individuals who score high on the "S" end of Jung's (1923) Sensation-Intuition (S-N) personality dimension prefer to relate to the world on the basis of facts and details. Conversely, high "N" individuals prefer an intuitive, future oriented approach that is less concerned with facts and details. Incompatibilities between teacher and student on the S-N dimension may impede the learning process. An awareness of one's position on the S-N continuum might permit both teacher and student to make appropriate adjustments to maximize the learning process.

Use of Learning Groups for Active Learning
David Wheeler, Robert Morris College, PA

A Learning Group is a diverse group of students who are responsible for the learning of the group members for the entire semester. This differs from previous collaborative learning strategies since the students are assigned to the groups for an entire semester and are responsible for the division of labor among group members. The Learning Group uses peer pressure to motivate students, uses the better students as group leaders to help poorer students with their learning, and provides support for every one in the classroom. Topics to be covered include: the process of assignments into groups; tasks appropriate to assign to Learning Groups; grading; and potential problems and ways to deal with them.

Student Learning Styles and Preferences for Classroom Activities
Laura Snodgrass & Kathleen Harring, Muhlenberg College, PA

Students were characterized by their dominant learning style using Kolb's learning style categorization. They then rated ten classroom activities according to how much each contributed to their understanding of the course material in both major and nonmajor classes. Analyses of variance showed significant differences in student preference for classroom activities as a function of learning style and type of class. Students' learning style influenced whether they considered activities that are generally considered to encourage active learning as contributing to their understanding of the course material.

Session 4 10:30 - 11:45

COFFEE, PUBLISHERS' DISPLAYS @

POSTER SESSION

The Relation Between Initial Student Attitudes and Final Grades *1*
Gerald Rubin, Central Valley Community College, Va

The present study showed that there is a relation between how a student perceives an introductory psychology course and the end grade received. Student confirmation of congruent and non-congruent beliefs were explained in the context of Festinger's theory of cognitive dissonance. Several ways of coping with student beliefs were discussed in the context of creatively enhancing student motivation.

A Multimedia Course in the Psychology of the Arts *2*
Donald Polzella, University of Dayton, OH

"Psychology of the Arts" explores the psychological processes that underlie artistic creation and perception. The course incorporates a Macintosh-based multimedia computer system, which can be used to create and present paintings, music, and a variety of visual and auditory interactive simulations.

Psychological Testing: The Student as Data Source and Data Analyst **3**
Carol Ann Dalto, Merrimack College, MA

An approach is described for maximizing the opportunity for active learning inherent in the Psychological Testing course. Students in this course provide an ongoing source of data that may be used to discuss key topics throughout the term. They develop basic computer skills so that they can assume the role of data analyst. Students are evaluated on regular homework assignments and a set of take-home reviews. Course evaluations show that students find this "hands-on" approach to Psychological Testing to be a valuable learning experience.

Construct Validity and the Naive Student **4**
Patricia Ditunno, Philadelphia College of Pharmacy & Science, PA

Basic concepts of construct validity (convergent and discriminant) are demonstrated to introductory students through the use of a semester-long participatory data collection exercise. Early in the semester, students are introduced to basic data collection techniques, and during the weeks of teaching individual differences, students self administer four self-report questionnaires (two intelligence tests and two trait related personality questionnaires). Intercorrelations demonstrate convergent and discriminant construct validity.

Active Learning in the Physiological Psychology Laboratory **5**
Josephine Wilson, Wittenberg University, OH

The typical laboratory exercise in psychology does not require students to think hard, and the student often comes away with a false notion of how research in psychology is conducted. The physiological psychology lab exercises described in this presentation are designed to immerse the student in the science of psychology and to teach them how research in physiological psychology is conducted. Students work in teams of three, designing their own laboratory exercises, formulating hypotheses, designing procedures, conducting their experiments using newly learned techniques, analyzing collected data, and preparing reports of their experiments.

Research and Community Practicums *6*
Nicola Schutte & John Malouff, Nova University, FL

Research Practicums and Community Practicums are valuable capstone experiences that allow students to put into practice many of the theoretical concepts they learned during their undergraduate studies. This presentation explains our research and community practicum formats, summarizes successes and pitfalls of the practicums, and provides course outlines and other materials for those who might want to offer similar practicums at their institutions.

Stereoscopic Vision: Learning by Drawing *7*
Paul Schulman, SUNY Institute of Technology at Utica/Rome, NY

A method for the freehand drawing of anaglyphs is described. Usually textbooks cover the topic of stereopsis in an abstract way, making it difficult for students to grasp. This method will enable students to draw anaglyphs by hand, and should make the concept of binocular disparity easier to learn.

The Way to a Statistics Student's Mind is Through the Stomach *8*
Elizabeth Jordan, Kalamazoo College, MI

This presentation describes several ways in which an instructor can use food in activities in an introductory statistics class. The exercises provide opportunities for the student to apply important concepts and statistical techniques. The use of food requires only a small investment by the teacher, and students respond positively, especially when they can consume their instructional materials.

Requiring Students to Think of Examples Can Increase Their Involvement *9*
Gabriele Sweidel, Kutztown University, PA

To increase participation in an introductory psychology class open to both majors and non majors, a journal writing assignment is required. Students must write about two examples (different topics) for each chapter from their life, their friends' or families', or from something they read. The focus on application forces students to think about the material and increases their sharing and questioning in class.

Creative Dialogues in a History of Psychology Course *10*
David Zehr, Plymouth State College, NH

Student teams developed classroom presentations and wrote chapters for a class-generated text in a history of psychology course. Presentations focused on creative dialogues rather than oral summaries of assigned topics.

Session 5 12:00 - 1:00

Rm 1 Presider: Holiday Adair, Wilkes University, PA

Roundtable Discussion: ***Acquisition of Applied Skills via Active Learning in the Classroom***
Holiday Adair, Wilkes University, PA

Specific courses in psychology, including Abnormal, Clinical, and Industrial Psychology, need to prepare students for entry-level jobs after the baccalaureate. A description of an Abnormal Psychology course in which students acquire interviewing, diagnostic, and report writing skills via in-class practice with role-played patients will be presented. Participants can share their ideas and concerns regarding this format for various subfields of psychology taught at the undergraduate level.

Rm 2 Presider: Laura Snodgrass, Muhlenberg College, PA

Three Laboratory Exercises in Cognitive Psychology
Anita Meehan, Kutztown University, PA

This presentation provides complete details and handouts for three laboratory exercises relating to memory and cognition. The topics addressed are: (1) metamemory and the "feeling-of-knowing," (2) prototypes and category formation, and (3) the availability heuristic. Students participate as subjects and compare their findings to the original studies.

An Undergraduate Research Experience in Cognitive Science
Paula Goolkasian & Lori Van Wallendael, University of North Carolina at Charlotte, NC

An undergraduate cognitive science laboratory that functions as a center for interdisciplinary student research is described. Upper division students, enrolled in independent research, work under the joint guidance of faculty from several disciplines (Computer Science, Psychology, Philosophy, Linguistics) and participate in a cognitive science seminar.

Rm 3 Presider: Roger Hoffman, SUNY College of Technology at Farmingdale, NY

Teaching Clinical Psychology Courses: Using the Process
Robert Bernstein, Marymount University, VA

When teaching clinically oriented courses in psychology, the teacher is presented with a unique opportunity to illustrate the content of the course by focusing on classroom interactions. As issues of transference, resistance, competition, and termination emerge during the semester among the students themselves and between the teacher and the students, the teacher can invite the class to explore how the very material that is being covered in the course content is being demonstrated in class. This method makes the course come alive in a way that enables the students to learn by experiencing.

Privacy Issues in Assignments
Susan Cloninger, Russell Sage College, NY

Personal journals are assigned in courses for a variety of reasons, including enhancing self-development and increasing writing fluency. Particularly when students disclose personal journals in a psychology class, ethical issues may arise. On the one hand, students may expect their disclosures will elicit therapeutic responses from the instructor. On the other hand, most teaching psychologists are not trained as counselors or therapists, and even when they are, the teacher may not have all the same options available as the therapist. Formal ethics statements directed to psychologists do not provide guidance for these situations. The purpose of this presentation is to propose and discuss such guidelines.

Lunch 1:00 - 2:30

Invited Speaker: Zick Rubin

Psychology and the Law

INVITED ADDRESS COURTESY OF HOUGHTON-MIFFLIN

Session 6 2:45 - 3:45

Rm 1 Presider: Eleanor Webber, Johnson State College, VT

Workshop: ***The Classroom Challenge: How to Create a Stimulating Learning Environment***
Janice Rafalowski, County College of Morris, NJ

Philosophical and practical suggestions are presented to create active learning situations. Professors are encouraged to abandon the "ivory tower" image and focus more on the "process" of learning using a "holistic" approach to promote personal growth, discussion, and sharing of experiences in an intellectually and experientially challenging environment.

Rm 2 Presider: Joan Paterna, Manchester Community Technical College, CT.

Teaching Psychology Through Independent Research
John Bridge, Southampton College, NY

For 13 years we have offered students the opportunity to earn college credit for planning, executing, and writing an APA-format paper on the results of an experiment of their own choosing. We usually encourage them to submit their papers to an undergraduate psychology conference. So far, 22 of 23 papers submitted have been accepted. It is a labor-intensive form of teaching, but the rewards for both students and faculty make it worth while.

Using Curricular Structure and Mentor-Oriented Research Courses to Enhance Active Learning
Jack Heller, Franklin & Marshall College, PA

It is possible to increase student commitment to independent learning and the research process by combining curricular changes with a new type of mentor-oriented course. The class format places emphasis on professional experiences for students while avoiding either a lecture or seminar format. The course is designed to engage students in the entire range of activities associated with experimental research in psychology.

Rm 3 Presider: David Griesé, SUNY College of Technology at Farmingdale, NY

Seminar in Aggression: An Interdisciplinary Review
Matthew Margres, Saginaw Valley State University, MI & Mark Margres, JFK Medical Center, NJ

Skim through a newspaper, take a trip to the movies, watch Saturday morning cartoons--what will you find? Aggression. From Nature Programs to World Politics, aggression is a pervasive and widely dispersed topic. It is also of such wide concern that my Aggression Seminar involves 6 guest speakers from other disciplines (and their required readings), incorporates them into a course founded upon Psychology, and has become a very popular and successful course.

Psychology Majors Assessment of Their Undergraduate Experience: 1973 to 1993 SUC at Buffalo Graduates
John Morganti, Michael Zborowski, & Robert Delprino, SUNY College at Buffalo, NY

A questionnaire that provided data on retrospective satisfaction and achievement was mailed to all identifiable graduates of the Psychology Department at SUC at Buffalo (n = 624). Examination of the quantitative and qualitative (open ended questions) data for the 176 completed surveys indicated good overall satisfaction and that a number of factors mediated satisfaction, especially involvement in specialized undergraduate experiences. Our efforts to expand the availability of specialized experiences such as internships and independent study will be discussed.

Coffee Break 3:45 - 4:15

Session 7 4:15 - 5:15

Rm 1 Presider: Nancy Philips, SUNY College of Technology at Farmingdale, NY

Workshop: Breaking Old Barriers and Building New Bridges: The Student as Colleague in the Active Learning Process
Geri Dino, Frostburg State University, MD

This workshop will examine several issues on incorporating active learning into a variety of psychology courses: (1) barriers to using active learning strategies, (2) programmatic and personal objectives that can be obtained through the use of active learning, and (3) techniques for incorporating active learning into a variety of courses such as I/O Psychology, Psychology of Adjustment, Social Psychology, and Psychology of Women.

Rm 2 Presider: Steven Gilbert, SUNY-Oneonta, NY

Active Learning in an Honors Thesis Course
Paul Chara, Loras College, IA

The thesis course, which is strictly voluntary, emphasizes preparation for advanced studies through an assessment system in which both the thesis final product and the process of producing the thesis are evaluated. Students are guided through a series of five graduated steps: choosing a research project topic, literature search, outlining the research design, a first draft of the thesis, and the finished thesis. Students share their ideas, problems, and solutions with one another during class meeting.

Teaching the Senior Seminar or Capstone Course
Mary Kay Reed, York College, PA

The Seminar or Capstone Course in Psychology has developed into an effective way of providing the graduating student with an experience which both integrates and finalizes the major. Ideas for the structure and content of the course are presented. Suggestions will also be offered on how the course can be utilized as a tool for assessing the major and core curriculum.

Rm 3 Presider: Sue Cloninger, Russell Sage College, NY

Encouraging the Use of Study Guides Among Students in Introductory Psychology
Michael Hackett, SUNY College of Technology at Farmingdale, NY

Instructors often urge their students to purchase and use study guides. In such instances, it is not unusual for less than half of the students to do so. This presentation will describe a simple motivational technique to increase student use of study guides. A separate issue is whether using study guides will improve student learning and test performance. Data relating student use of the study guide to test performance will be presented.

Bringing Personality Theories to Life
Eleanor Webber, Johnson State College, VT

In this presentation I will share ideas on how to bring a course on Personality Theories to life by using a variety of strategies to get students actively involved. Ideas presented will focus primarily on strategies applicable to the theories of Freud, Adler, Jung, Skinner, Bandura, Dollard & Miller, and Kelly. The session will have a nuts-and-bolts orientation, offering specific exercises, testing ideas, and course requirements which help students to find ways to relate in a concrete and personal way to the theoretical works of these leading psychologists.

Reception 6:00-7:00

Dinner 7:00

Evening Hospitality Suite

FRIDAY March 18, 1994

Breakfast 8:00 - 9:30

Session 8 9:30 - 11:00

Rm 1 Presider: Libby Ortiz, St. Thomas Aquinas College, NY

Workshop: Activating Students' Empathic Understanding through Multiple Perspectives
Lisa Fontes, Keene State College, NH and Patrick MacNamara, SUNY College at Buffalo, NY

We believe the increased learning associated with the use of multiple perspectives in the classroom reflects the activation in students of empathic understanding, in addition to more traditional and abstract forms of understanding. In this presentation we offer a series of steps designed to tap students' empathic abilities and encourage them to explore a variety of viewpoints. Our techniques have resulted in classes where students grow to care passionately about the material at hand. Participants will be able to apply these methods in a variety of courses at different levels.

Rm 2 Presider: Susan Marell, St. Thomas Aquinas College, NY

Teaching the Experimental Psychology Course with a Revised Framework
Stacey Zaremba, Moravian College, PA

This presentation will concentrate on the development and restructuring of an Experimental Psychology course. It will include a discussion of the assignments used to get students to become active participants in the scientific process. One such assignment is the development of student research teams and the use of "mini-conventions" in the classroom. An analysis of student responses and evaluations to this new format will also be provided.

Pavlovian Conditioning of the Tickle Response in Human Subjects: Temporal and Delay Conditioning

Bobby Newman, Mairead O'Grady, Carolyn Ryan, & Nancy Hemmes, Queens College, CUNY, NY

This talk will consist of a description and a video-taped example of an experiment that demonstrates Pavlovian conditioning for undergraduate and graduate students. The experiment requires no apparatus and is easily conducted in any class. It provides students with an amusing, yet intuitively understandable, demonstration of what can be a difficult process to understand and study in a classroom setting.

Laboratory in the Classroom: Touch Perception
Otto Berliner, SUNY College of Technology at Alfred, NY

The purpose of this instructional technique is to (1) demonstrate the complexities involved in sensation and perception, (2) involve the whole class in the experiment, (3) generate intellectual curiosity, and (4) enhance in-depth communication. The experiment focuses on touch perception of a novel experience.

Coffee Break 11:00 - 11:20

Session 9 11:20 - 12:50

Rm 1 Presider: Michael Hackett, SUNY College of Technology at Farmingdale, NY

Workshop: Cooperation in Operation: Examples of Successful Cooperative Learning Lessons from Four Areas of Psychology
Susan Marell & Libby Ortiz, St. Thomas Aquinas College, NY

Cooperative learning offers many advantages when used as an adjunct to traditional lecture and classroom discussions. There are many articles which have already documented the value of cooperative learning at the college level, but leave the reader wondering how to apply it to one's own classroom. This workshop will provide both a theoretical base as well as practical hands-on experiences with cooperative learning. Participants will obtain a much better understanding of how to design and implement their own cooperative learning lessons.

Rm 2 Presider: Barbara Gentile, Simmons College, MA

Knowing Thyself: Teaching a Course on Social Psychological Perspectives on Self-Reflection
Dana Dunn, Moravian College, PA

Introspection is usually perceived to be an error free exercise, such that self-reflection should lead to self-knowledge. I teach a course that opens self-reflection and self-knowledge up to doubt, and in doing so, I review recent research in social psychology, as well as related work from psychoanalysis and personality. The course has the advantage of organizing a collection of seemingly separate research topics into a coherent framework emphasizing the difficulty in accurately knowing ourselves.

Who Me? Prejudiced?
Jeffrey Adams, St. Michael's College, VT

Though the topic of prejudice can elicit lively class discussion, understanding its dynamics is often limited by student disassociation -- other people are prejudiced, not me -- and by limiting its association to socially stressed areas such as race and gender prejudice. To battle these obstacles, students participate in a brief experiential exercise designed to evoke personal stereotypical beliefs and prejudiced feelings. Group discussion of the exercise is used to illustrate the definition of prejudice as well as its various social and cognitive sources.

How Students Perceive Classroom Exercises in a Social Psychology Course
Karen O'Quin, SUNY College at Buffalo, NY

This presentation will include several in-class exercises for social psychology, which require relatively little data collection or analysis, minimal preparation on the part of the instructor, and no teaching assistant. Copies of the exercises themselves will be distributed. In addition, the exercises will be compared, using students' evaluations, on a 10-item questionnaire assessing perceived learning, contribution to the understanding of social psychology, etc.

Rm 3 Presider: Sandra Hartog, SUNY College of Technology at Farmingdale, NY

Students' Perceptions of Active Learning
The Psychology Students of SUNY College of Technology at Farmingdale, NY

Lunch 1:00-2:00

We hope you found the conference enjoyable and educational.

We look forward to seeing you next year.

CONFERENCE COMMITTEE:

JUDITH R. LEVINE, Chairperson
DAVID GRIESÉ
SANDRA B. HARTOG
GENE INDENBAUM

BARBARA A. SARRINGER, EXECUTIVE ASSISTANT

They Can't Learn When They Don't Know How:

Teaching Statistics Using a Learning to Learn Model

Beverly Rolker-Dolinsky, Ph.D.

Donna Qualters, M.S.

Endicott College

Abstract

In the past it was assumed that a college student came into the class knowing how to learn. This is no longer true. Today's college professor faces a class reflecting tremendous variations not only in aptitude and learning styles, but also in meta-cognitive skills. In an age of outcome assessment and accountability, how can a professor cope with this varied classroom and insure that course content is learned as well as taught? An experimental collaborative teaching project in a statistics course at Endicott College attempted to address this question using the learning to learn model.

References

Countryman, J. (1992). Writing to Learn Mathematics: Strategies That Work. Portsmouth, N.H. Heinemann Ed.

Garofalo, J. & Lester, f. (1985). Metacognition, cognitive monitoring, and mathematical performance. Journal for REsearch in Mathematics Education, 16, 163-176.

Heiman, M. & Slomianko, J. (1988). Methods of Inquiry. Cambridge, MA Learning to Learn Inc.

Keimig, R. (1983). Raising Academic Standards: A Guide to Learning Improvement. AAHE-ERIC/Higher Education Research Report NO. 4. Washington D.C.: Association for the Study of Higher Education.

LASSI (1987). H&H Publishing Co. Inc. 1231 Kapp Dr. Clearwater, FL 43625.

Light, R. (1990). The Harvard Assessment Seminars. Cambridge, MA: Harvard University Graduate School of Education and Kennedy School of Government.

They Can't Learn When They Don't Know How:

Teaching Statistics Using a Learning to Learn Model

In the past it was assumed that a college student came into the class knowing how to learn. This is no longer true. Today's college professor faces a class reflecting tremendous variations not only in aptitude and learning styles, but also in meta-cognitive skills. In an age of outcome assessment and accountability, how can a professor cope with this varied classroom and insure that course content is learned as well as taught? An experimental collaborative teaching project in a statistics course at Endicott College attempted to address this question using the learning to learn model.

In the field of psychology, there has been little recognition of longstanding education theory and research concerning methods of instruction. This research has demonstrated that traditional college classroom instruction is often ineffective. In her 1983 monograph, Raising Academic Standards, Keimig concluded that the skill development necessary for students to achieve at college level disciplines was "unattainable by most underprepared students through traditionally delivered college institutions" (pg. 12).

The above research pointed to the need for meta-cognitive skills training for the college student and a new pedagogical approach for instructors. Recognizing this need, Heiman and Slomianko (1988) developed an approach now known as the Learning to Learn movement. The learning to learn model provides frameworks in which a student's learning style is assessed and study skills are taught directly in the classroom environment. The model emphasizes frequent assessment of a student's learning processes and mastery of content for the student's point of information.

As at most institutions, the required statistics course for the B.S. degree in psychology

at Endicott College had the reputation of being extremely difficult. The course was taught in a traditional lecture format with three exams and several quizzes used as methods of assessment. It became clear to the instructor that this traditional method of instruction was not working for many students. The teaching methods were not enabling students to master the difficult theoretical and/or mathematical concepts inherent in the course.

In an attempt to alleviate this problem, a collaborative learning to learn model was applied. One significant change made was that the course was now team taught by both a faculty content specialist and a learning skills specialist. Both individuals attended all classes. Joint planning occurred in regard to class activities only; content remained the purview of the content specialist. The content and learning skills specialist met continually throughout the semester to discuss the effectiveness of techniques and to suggest new methods of teaching techniques and in-class assessment.

As suggested by the skills specialist, the content specialist made gradual but significant changes in her teaching style in order to promote the learning to learn approach. Content for the course was now presented in short lecture segments (10 to 20 minutes) which were then followed by frequent small group work. The purpose of this group work was to provide a cooperative environment for the students which would allow them to gain insight into their own learning styles by comparing them to other students styles and to provide a more active approach to learning.

A second change made in the class was the use of frequent assessment of the learning styles, changes and learning difficulties of students. One method of assessment was the learning assessment journal. This form of writing was used to help students understand their own

learning strengths and weaknesses as well as the metacognitive skills they used or lacked. Recent research has proven the value of this kind of writing in not only reading based subjects, but also mathematics (Countryman, 1992; Garafalo and Lester, 1983). The skills specialist read and provided comments and/or suggestions on a weekly basis. This qualitative approach allowed the instructors to gain insight into each student's learning. The journal entries revolved around understanding of students own learning styles, math anxiety, problem solving, and "tricks" to study in math based courses.

Another form of assessment used was the One-Minute paper based on Richard Light's report of the Harvard Assessment Project (Light, 1990). In the last few minutes of class, students were asked to write down the major points of the day's lecture and to write down any problems or difficulties they had with the material. This technique allowed the instructors to quickly assess what was being understood and where adjustment or introduction of a strategy would need to take place.

As an additional method of assessment, frequent quizzes were also used on an individual and group basis. At least half of the quizzes were evaluated for accuracy but not given a grade. The remaining half were graded. In the course, mock exams were also assigned in which students presented, explained and debated answer to possible exam questions. The only input made by the instructor were comments regarding the completeness of answers.

An additional concern in the course was to reduce a student's hesitancy to voice opinions and to allow for reflective thinking when a question was asked. In order to do this, students were first asked to write down their answers. When asking students to then volunteer their answers, the instructor would no longer offer an immediate evaluation of the response. Instead

she would ask other students if they would like to add to or change the former student's response. When a correct answer was found, it was formally presented to the class so that they had a student's version to compare to the formal teacher version.

Based on the assessment journal, the skills specialist provided several specialized lectures to the students in order to enhance their metacognitive skills. Students were taught various methods of reading a textbook, notetaking skills, and test-taking skills based on the materials from the course during regular class meetings. In addition, she presented an anxiety management lecture which taught students coping strategies for anxiety produced by classroom presentation, studying and test taking. At all of these sessions the content instructor was present and participated.

Pre-post testing of the students learning skills was performed using the Learning and Study Strategies Inventory (LASSI, 1987). Analysis of the LASSI indicated a significant increase in student perceived motivation, information processing skills, use of support techniques, and test-taking strategies. Student anxiety was significantly decreased. Grades were slightly higher and less varied compared to previous semesters. The content specialist perceived significantly more class participation as the semester continued. Office hours were significantly reduced to the point that they were virtually not necessary. Lastly, student ratings of the course were exceptionally positive.

Did we fail to cover as much content? Yes and no. We did loose approximately a week's worth of material at the end of the semester. However, it was felt that the positive outcomes far outweighed this loss.

The results of this project seem to point strongly for the need to teach metacognitive

skills directly in the classroom environment. Faculty need to know not only what to teach, but how to teach it, and more importantly why to teach it that way. By providing methods for the learner to assess their strengths and weaknesses, by educating faculty in the art of teaching, and by helping both faculty and student to realize their responsibility in a joint learning process, we increase everyone's success.

Title: **Dare We Ask Them What They Learned?**

Presenter: Dr. Linda L. Dunlap
Marist College
Department of Psychology
Poughkeepsie, New York, 12601

As faculty members we frequently engage in the evaluation of our students' knowledge. We assume that students benefit (learn) from the opportunities that we make available in the classroom or through assignments. The most frequent forms of classroom assessment are examinations, papers, homework assignments, and quizzes. Additionally, many teachers provide the student's with an opportunity to fill-out course evaluation forms at the end of the course. I believe there are many more ways that what goes on in the classroom should be assessed.

One thing that is rarely assessed are the course outlines that we provide to our students. Often these course outlines are rather lengthy. We should assess whether our students read these outlines and find them useful. We should be providing information that is useful and meaningful. Yet, few faculty member think to assess whether students read or understand the information that we are attempting to provide in our course outlines. I will discuss ways to assess course outlines and methods to make them more useful. Please refer to attachment.

Most of us would like to assume that our lectures are clear and meaningful and convey new information to our students. It may be useful to assess whether or not this is true on a regular basis and not at the end of each semester (course evaluations). A three minute assessment every two weeks or so, which asked the student directly if our lectures are clear and what new information they

learned may prove valuable. Models for this type of assessment and a discussion of the possible pitfalls for this type of assessment will be discussed. Please refer to attachment.

We often give homework or paper assignments with certain goals in mind. For example, I frequently give short paper assignments (2-3 pages) in the attempt to involve the students in critical thinking and integration of course material. Yet, it has been only recently that I have begun to ask my students what they learned when they wrote the papers and if they felt they were involved in critical thinking. I have also begun to asked student for suggestions on what would improve course assignments. I am beginning to believe that students often do know what they need to know and how they may best come to know it. Other specific suggestion for involving students in assessments of course requirements will be discussed. See attachments.

Let's try doing the obvious....asking students directly how we can improve student learning. If we believe they are able to learn then we must believe they can also help us improve our teaching strategies

Evaluation of course outline:

Does the outline contain information on:

1. What are the instructor's office hours?

2. Where is the instructor's office located?

3. What is the telephone number(s) of the instructor?

4. What is one of the major goals of the course?

5. List five major topics that will be covered in this course.

6. How many exams, quizzes, papers, and homework assignments will there be? When are they? How much do they contribute to my course grade? What will they be like?

7. What is the attendance policy?

8. What happens if you miss an examination, quiz, or turn in an assignment late? (e.g., Number of exams, type of format, percent of grade)

Evaluation of course overview lecture:

1. How much time does class meet each week?

2. How much time should you plan to spend preparing for class each week?

3. What grade should you expect to receive if you spend 6 hours per week preparing for this course?

4. How many times should you read each assignment?

5. If you do not understand something in the textbook, what should you do?

6. If you do not understand something during the lecture, what should you do?

7. What will you have to do to adequately prepare for oral and written quizzes, examinations, papers, and other assignments?

8. What does the instructor mean when she/he says you must read actively, and not passively?

9. What should you do if you miss class?

10. Does the instructor give extra credit?

11. What should you take notes on during class?

12. Can the instructor teach you anything?

13. What are the instructor's responsibilties.

Note: At the end of the semester this survey can be taken again and also evaluate whether or not the student did each of these things, and whether the instructor fulfilled his/her responsibilties.

Evaluation of lectures/ video/ group activity:

1. I found the information provided in todays lecture/activity helpful?

2. The single most important thing I learned today was...

3. I did not understand...

4. I would like more information on...

5. I enjoyed todays lecture?

6. Suggestions to the teacher:

Evaluation of short papers/assignments:

1. I learned more about the course material from doing this assignment?

2. I sharpened my communication skills by completing this assignment.

3. I synthesized material and thought critically while completing this assignment.

4. The percent of my couse grade based on this assignment is appropriate.

5. Suggestions for other paper topics or assignment activities:

Evaluation of quiz or examination:

1. The test covered what I expected?

2. The test format is appropriate?

3. The point allocation is fair?

4. Suggestions for improvement:

Assumptions/Expectations

In the classes that I teach I have some assumptions/expectations which are summarized below with the hope that this will help you do well in my course. I am sharing these with you now instead of letting you wait until later in the semester before you become aware of them. My goal is to have you learn as much in the course as possible, and have you earn a grade that you are satisfied with, given the time and effort that you spend on the course. If you want to accomplish this you will do the following.

I assume/expect that:

If you are a full time student (15 credits), your course work is a full time job (40 - 45 hours per week). This will be composed of about 15 hours in class and 30 hours outside of class (2 for 1 ratio). Your education is your current priority in your allocation of time; however, you will still have 123 hours left in the week for sleep, part-time jobs, and recreation.

You will spend about 6 hours per week outside of class studying for this course if you are an average student who is working toward an average grade of "C".

You can read and understand most things in the textbook on your own without my assistance (if you spend the time and effort to do so). You will use a dictionary or glossary if you encounter a word you do not understand.

When you do not understand something in the textbook, you will mark it and ask me about it in class or in my office. When you do not understand something in class, you will immediately ask for clarification.

You will read, study, and learn the course material twice, once when assigned or discussed in class, and once again before the exams. (People learn things better when they study them more than once.)

You will prepare for class by reading assigned pages. Oral and written quizzes, and assignments will encourage you to avoid procrastination.

You will read chapters actively, not passively (take notes, or underline, or outline, plus ask questions as you read and relate items to each other).

You will read for both main points and details. Pay attention to examples of terms or concepts. Understand concepts rather than just trying to memorize them.

If you do not understand a paragraph, you will read it again, then again, then see me. In general, you should not turn the page until you understand everything on that page.

You will attend all classes and be on time. If for any reason you will be late or absent, you will notify me before or after the class.

If a class is missed, you will get notes/assignments from 2 other students and/or from me before the next class.

You will take notes on everything said in class. If I give an "open notes" quiz at the end of a class you will get a perfect score.

You will see me immediately if you have questions or problems with the class in general or with a particular chapter or assignment.

I assume that I cannot really teach you anything, but that I can help guide and assist your own efforts at learning the material. Thus, I expect of myself, and you should expect of me, that I will challenge you to meet the goals of the course as listed in the course outline. Along with this challenge I offer you the following support. I will:

Present goals, material, and assignments clearly.
Be open to questions from you in class.
Give rapid feedback in my evaluations of papers and exams.
Treat all students equally and fairly.
Be available outside of class for individual assistance.

If I do not meet these expectations or if you think I should add others, please let me know.

Relating Familiar Material to New Material: One Form of Active Learning

Judith Luis
Division of Social Sciences
St. Vincent's College
St. John's University, New York

I teach, but I am not a trained teacher. I teach psychology to undergraduates, but I have not been trained to do this. I have not taken education courses in methods of teaching. My only training has come from in class experience, trying different things, failing, trying again, sometimes succeeding. It seems that I have been actively learning how to teach. Some of the best learning happens when we teach ourselves.

No one really taught us to walk or talk; we used our environment to develop our inborn potential. But that kind of maturational event took years to unfold. In the classroom, we don't have that kind of time. We can't wait for our students to unfold, to use their environment to unlock potential. We have to speed up the process. There are many who have written to suggest how this might be done (see Sprinthall and Sprinthall, 1990). Some of these are:

John Dewey wanted teachers to go where the student is, and begin there. He argued that children need to participate actively in learning, not receive passively. He said that children would "learn by doing".

William James wanted teachers to consider the "mind" of the child, and urged teachers to make use of what students said in class to direct how they would teach.

Edward Thorndike thought that certain things could not be learned except by "actual performance".

Jean Piaget believed that adaptation to new material had to be built on some structure which already existed, whether that structure was a biological schema or some representation of old learning. Each stage of cognitive development is built on the one which went before it.

In an interview (Halonen, 1992), model teacher Wilbert McKeachie said "you've got to build a bridge between what is in your head and in the student's head...that means...trying to make contact with what is already there."

The common thread among these ideas is to start where the learner is and catch them with something familiar -- a hook. Take the familiar and link it to what is being learned. The learner can make the leap into new territory and land on solid ground. Instead of being pushed passively from behind, the learner has participated actively in the process.

Demonstration of the effectiveness of this model can be found in more recent work on elaboration. Stein & Bransford (1979) asked subjects to learn sentences in which a type of man was carrying out some kind of action, for example, "the lucky man left town" (as opposed to the sad or hungry man). When that sentence was enhanced by the elaborative phrase "before the earthquake struck", subjects' cued recall of the man as "lucky" significantly improved over cued recall in other conditions. If you are informed that the "lucky man left town before the earthquake struck", you will certainly remember him as a lucky man if you already know and understand that an earthquake can destroy a town and any man would be very lucky to have missed it by leaving town. Your learning system is making this connection. You are not passively receiving information, without effort on your part. You are actively learning.

Elaborators, based on knowledge you already possess, will enhance your learning of new, sometimes arbitrary, material. Undergraduates, particularly those taking psychology for the first time, are confronted with a lot of arbitrary material. Almost none of it resembles what they thought they'd be learning when they signed up for the course. They may have thought they'd be learning how to manipulate the psychosexual behavior of their boyfriend or girlfriend. Instead, they're being taught neurotransmitters, retinal disparity, and homeostasis. So one of our jobs is to help the student learn by relating these strange concepts to things which are familiar to them. You'll notice I haven't said "relate these strange concepts to what they already know", since some would claim that undergraduates don't actually know anything. However, I do believe that undergraduates know things. The teacher has to figure out what those things are and put them to work.

Undergraduates know rock music, fashion, food, video games, and of course, sex. They are living interesting lives in which they are often struggling with issues of parental divorce, alcohol, drugs; some of these students may be single parents. Whoever your students are, you can teach them by starting at their level. I would like to give you some examples of this.

When teaching the social psychological principles of attitude formation and stereotypes, start with the students' own attitudes. Students know about attitudes. Begin by asking students to fill in the blank sentences "All men are _____", "All women are _____", and "All college professors are_____". Allow them to shout out their answers; it

adds to the social mayhem of the moment, which is part of the lesson after all. As they call out generally unflattering terms, challenge them to defend their position, emphasizing the word "all" in your challenge. They quickly become aware of their own strong stereotypical thinking, and they are much more open to the lesson which follows.

When teaching states of consciousness and altered states of consciousness, start with sleep. Students know about sleep. Lead them through a relaxation exercise in which they progressively tense and then release muscle groups. Do not allow them to actually fall asleep, or things could get tricky. Rather, ask them to report on how they were feeling before the exercise started, how they felt during it, and whether they were aware of any unexpected thoughts throughout all of it. Now they are ready to learn about active and passive consciousness, and usually will volunteer more stories about the dreams they've been having lately than you care to hear. But of course, this can lead into a great discussion of dreams, and Freud, and the unconscious.

When teaching about eating disorders, food can be invaluable. Students know about food. Ask several individual students to bring in one food item, so that the total calorie count of all the foods brought in is 5000 or more calories. Put all this food on one desk and explain that this represents one bulimic binge. (After, allow the students to divide and share the food). This representation of a serious problem again leads easily to a more formal lesson.

I would like to do two demonstrations, which I hope you will enjoy. The first involves the difference between sensation and perception. The second involves the distinctions among structuralism, functionalism, and gestaltism. These are both fairly dry topics for students, but these demonstrations allow the student to link new with old.

In the first example, sensation and perception, the hook is rock music. Students know about rock music. In most songs, no one musician is actually playing the song which is heard. There are lead guitarists, bass guitarists, drummers, singers, all playing their part which is perceived by the listener as a whole song. The perceived whole is made up of many separate sensory experiences. When the students are asked to watch a rock video in which the separate musicians can be seen playing their separate parts, the visual information provided by the camera adds to the experience. They see the

bass player doing his part, they can hear the bass line, yet they tie it all up in their heads in a total perceptual process. The video I will show you is from the movie "Woodstock". I thought that we might enjoy seeing something from roughly our own student years. It also has excellent camera work, in that a split screen allows the viewer to see more than one musician at a time. You can adapt this to any video you'd like; if you're able to get a video of a symphony playing classical music, that can also be effective.

In the second example of structuralism, functionalism, and gestaltism, the hook is jigsaw puzzles. Students enjoy playing games, and they know jigsaw puzzles. This demonstration requires some puzzles which can be put together quickly. A 500 piece puzzle is not appropriate here. Depending on your class size, use one or more puzzles. (I have used 4 puzzles of about 13 pieces each in a class of 50 students). Distribute puzzle pieces and the frame so that everyone in the class has something in their hand. Ask students to describe the piece in their hand. Try to elicit responses about its shape, color, texture, size. Then ask each student to find one other student who has a piece which fits into theirs. Point out that the shape, color, size may play some role in finding another piece to fit, but that we are mostly interested in seeing how they fit together, how they work. Finally, ask all students to work together so that the puzzle (or puzzles) can be solved. When this is completed, show them how the whole was created from individual pieces of a certain size, shape, color, and texture fitting together, but that it is not the pieces or the fitting which interests us now. It is the whole, which is truly more than the sum of its parts. You have just given them an opportunity to understand structuralism (the puzzle piece), functionalism (how it works with another piece), and gestaltism (the whole puzzle).

In closing, if teachers begin where the students are and lead them into active involvement with the material by hooking them with something familiar, students can link what they already know to what they are trying to learn. When such a link is made, understanding is possible, and true learning occurs.

References

Halonen, J. (1992). "I Was Just Lucky": An Interview With Model Teacher Wilbert J. McKeachie. In Puente, A..E., Matthews, J.R., and Brewer, C.L. (Eds.), Teaching Psychology in America: A History. Washington, DC.: American Psychological Association.

Sprinthall, N.A. & Sprinthall, R.C. (1990). Educational Psychology. New York: McGraw Hill.

Stein, B.S. & Bransford, J.D. (1979). Constraints on effective elaboration: Effects of precision and subject generation. Journal of Verbal Learning and Verbal Behavior, 18, 769-777.

A Reactionary View of Psychology 101

Barbara Gentile
Benjamin Miller

Simmons College
Boston, MA

Introduction

In the biological and physical sciences, students generally understand and accept the need to begin with an introductory course: there are certain basic ideas and techniques which they must master before going on in these fields. In addition, there is general agreement among faculty in these fields about what the beginning student needs to learn. The picture in the social sciences is somewhat different. Here students are less convinced of the need for a formal introduction to the field, and this is mirrored in the low level of uniformity among such courses.

Psychology, which spans the social, biological and to some degree the physical sciences, combines both of the above scenarios. On the one hand there is a fairly high degree of uniformity among introductory psychology courses and texts. On the other hand it may not be obvious to students that the study of psychology must begin with an introductory course.

Like their colleagues in other sciences, many psychologists work in laboratories on complex and esoteric problems, but this is hardly the popular image of a psychologist. The practice of clinical psychology has more visibility than experimental work, and many students know psychology only as a helping profession, unaware that it is a science as well. The perception of psychology as a primarily clinical field may also contribute to students' sense that they already know a good deal of psychology. Unlike the work of the laboratory scientist, the work of the clinical psychologist appears to students to be quite accessible. Clinical issues are much in the news, and many students have had professional contact with some kind of psychologist.

The set of attitudes with which students approach the study of psychology presents a unique problem for those who teach the introductory course. Psychology may not appear to students to be based on a rigorous foundation of basic science. Given this perspective it is not clear to students why they cannot begin with the very issues that attracted them to psychology in the first place. Students may come to the course expecting detailed and specific answers to questions about people's behavior or motivations. Instructors, on the other hand, most often approach the introductory course as an opportunity to convey to students both a broader view of psychology as the scientific study of the mind and behavior and the sense that an understanding of real-world issues is complex and difficult to achieve. If the introductory course is successful in challenging students' expectations about the field, then it will also be successful in encouraging students to think about psychological issues in scientific terms.

Having said that, it must be noted that the way science is taught is currently the subject of much concern. There has been a great deal of discussion in recent years about the difficulties involved in recruiting undergraduate students, especially women and minorities, to the sciences (Alper, 1993; Gibbons, 1992; Massey, 1992). Further, students who begin with an undergraduate major in one of the sciences often switch to another field. For example, a four-year study of 25,000 undergraduates at 177 colleges and universities in the United States done by the Higher Education Research Foundation of the University of California found that the number of undergraduate science, mathematics, and engineering majors dropped by an average of 40% between the freshman and senior years (Hoke, 1993). The suggestion has been made that one of the problems with science courses is that they present students with scientific knowledge but do not teach them to think like scientists. The best way to learn science, it is thought (Culotta, 1990; Travis, 1992), is to do science.

The traditional facts and theories course may not be the best way to engage students in any science, and this presumably includes psychology. Students' interests may not be addressed by an introductory psychology course organized around the traditional subfields within the discipline. Rather than demanding that students accommodate themselves to this traditional organization, we began to think about the possibility of starting with real world issues whose importance is self-evident and with which students are familiar. This approach could exploit the interests beginning students bring to the course while challenging their expectations about the form answers might take.

We began to imagine an introductory course in which traditional topics are replaced by topics such as

eating behavior, day care, the Twinkie defense, eyewitness testimony, gender differences, and artificial intelligence. Such topics engage students and could motivate them to learn psychological methods, ideas, and empirical results. In the end, if all went well, students would leave understanding more broadly the questions they began with and able to think about such questions from the perspective of scientific psychology. But this approach presents some problems for psychology because of the kinds of expectations students may bring to its study, the kinds of expectations described earlier. If students approach the study of psychology with the expectation that it is a helping profession and with the belief that it is a field about which they already know a great deal, how difficult will it be to move them from addressing real world issues and concerns in an anecdotal and subjective way to beginning to approach them in a scientific and sophisticated way?

To assess students' expectations and faculty goals for the introductory course, we conducted a survey of faculty who teach the course as well as one of students who take it.

The Faculty Survey

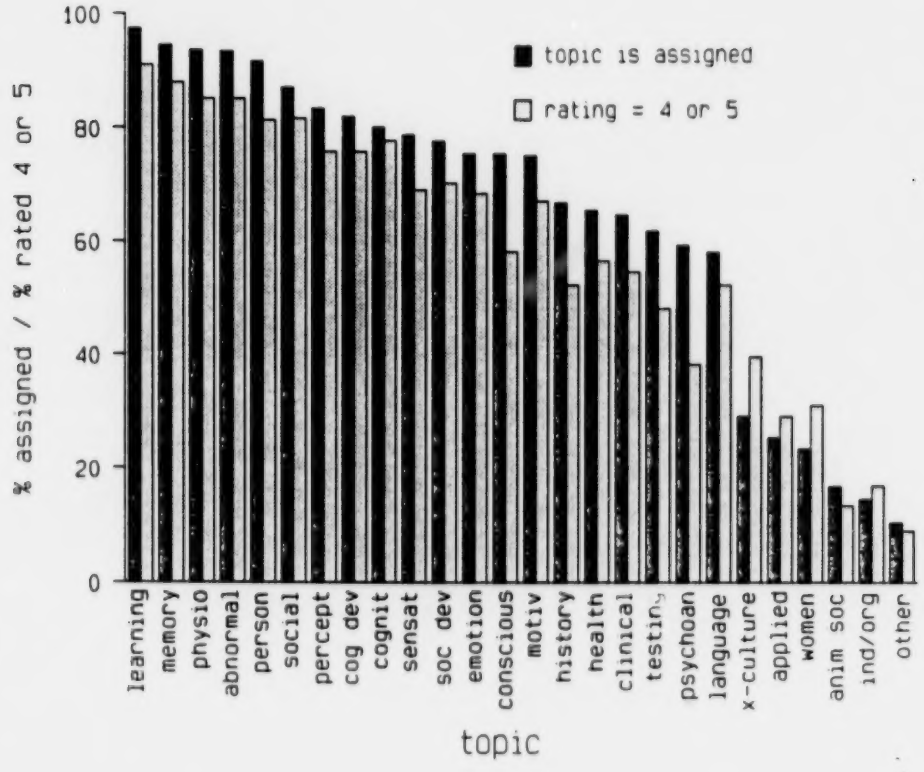
The faculty survey was sent to all undergraduate psychology departments offering a baccalaureate degree in psychology. There are 1190 such departments. We received responses from 761 faculty at 491 institutions. The questionnaire asked faculty about their goals and teaching methods and about the structure of their course. Several questions about faculty members' backgrounds and about institutional characteristics were included as well. Thirty-nine percent of our respondents teach at public institutions; 94% at co-educational schools. Other characteristics of our respondents are presented in Table 1.

Table 1.

a) Gender	women	35%
	men	65
b) Status	full-time	90%
	part-time	10
c) Rank	professor	36%
	assoc. prof.	25
	asst. prof.	27
	instructor	5
	grad. student	4
	other	3
d) Years teaching intro.	1-3	21%
	4-6	14
	7-10	14
	11-15	17
	16-20	17
	> 20	16

Ninety-eight percent of our respondents use a textbook. We asked them to check which of 25 topics they assign in their course, and to rate, on a scale of 1 (low) to 5 (high) the importance of each topic in an introductory course. Faculty assign an average of 16.8 topics; the median is 17. Figure 1 shows the proportion of respondents who assign each topic and the proportion who rate the importance of each topic high (i.e. 4 or 5).

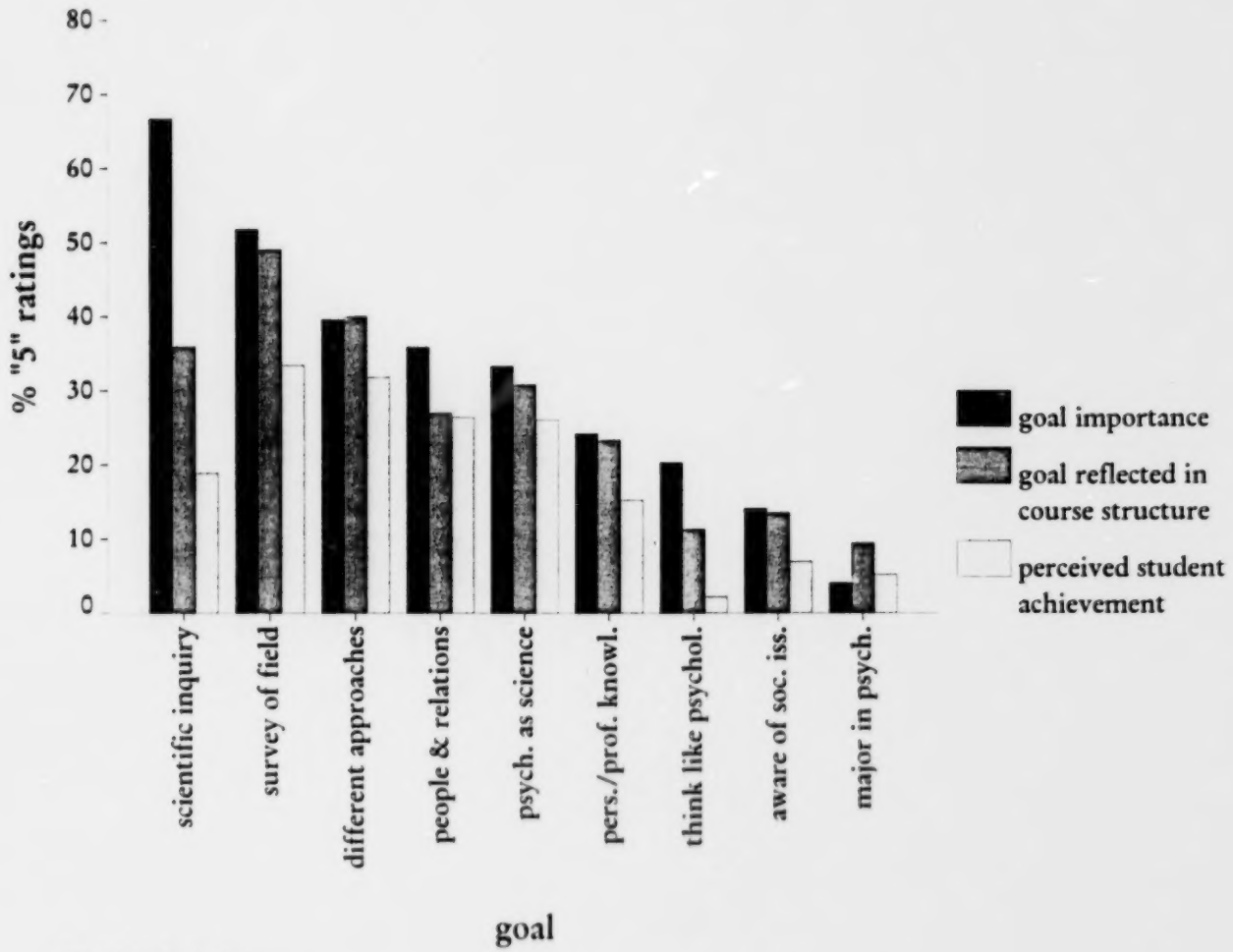
Figure 1. Assignment and high rating of topics



We also asked respondents to answer three questions about each of a set of nine broad goals for the course. They rated the importance of each goal (goal importance), the degree to which their course's structure reflects each goal (goal reflection), and their estimate of student success in achieving each goal (goal outcome). Respondents rated goal importance higher than they rated goal reflection, and they rated goal outcome lower still. Figure 2 shows that the most important goal ("to engage students in scientific inquiry about psychological processes"), which was rated very important by 66%, showed the largest disparity. Only 37% rated this goal as "very well" met by the structure of their courses, and only 19% believe that their students "definitely" achieve this goal in the course.

BEST COPY AVAILABLE

Figure 2. Faculty goals



The Student Survey

The student survey was completed by 497 undergraduate students enrolled in introductory psychology courses at four private colleges in the Boston area. Two of the four were women's colleges. The survey asked students why they were taking the course, what they expected from it, and a few demographic questions. Seventy-one percent of the respondents were women; 99% were between 17 and 22 years of age; 54% were freshmen, 28% sophomores, 10% juniors, and 8% seniors.

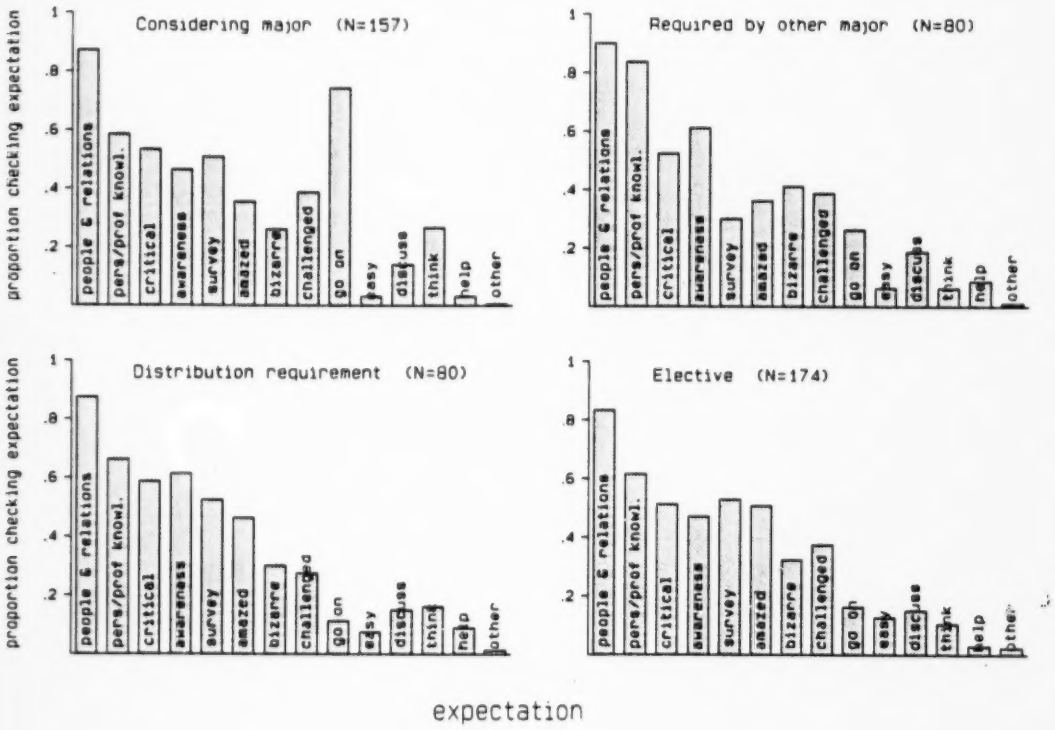
Students were asked about their expectations for the introductory course, checking up to six from the following list:

1. to increase your understanding of people and relationships
2. to gain knowledge that could help you in your personal and professional life
3. to learn to think critically about ideas and data
4. to increase your awareness of and/or knowledge about important social issues
5. to obtain a comprehensive survey of the field
6. to be entertained, amazed, surprised

7. to learn of bizarre and aberrant behavior
8. to be intellectually challenged
9. to learn what you need to know to go on in psychology
10. that it will be an easy course
11. to contribute your own knowledge and experience to class discussions
12. to learn to think like a psychologist
13. to be helped with serious personal problems
14. other

The proportions of students checking each expectation are shown in Figure 3, broken down by students' reasons for taking the course.

Figure 3. Student expectations by reasons for taking the course



Overall, the two most common expectations were those consistent with the student view of psychology as being primarily concerned with individuals and their relations. Not surprisingly, students planning to major in psychology have slightly different expectations than students taking the course for other reasons.

We used a cluster analysis to investigate patterns in the expectations checked by students. To the first thirteen expectations above we added two other variables: 1) considering a major in psychology and 2) taking the course for other reasons. The following clusters emerged:

1. considering a major in psychology
   learn what's needed to go on in psychology
   learn to think like a psychologist

2. taking the course for other reasons
   it will be an easy course
   learn about bizarre and aberrant behavior
   be surprised, entertained, and amazed

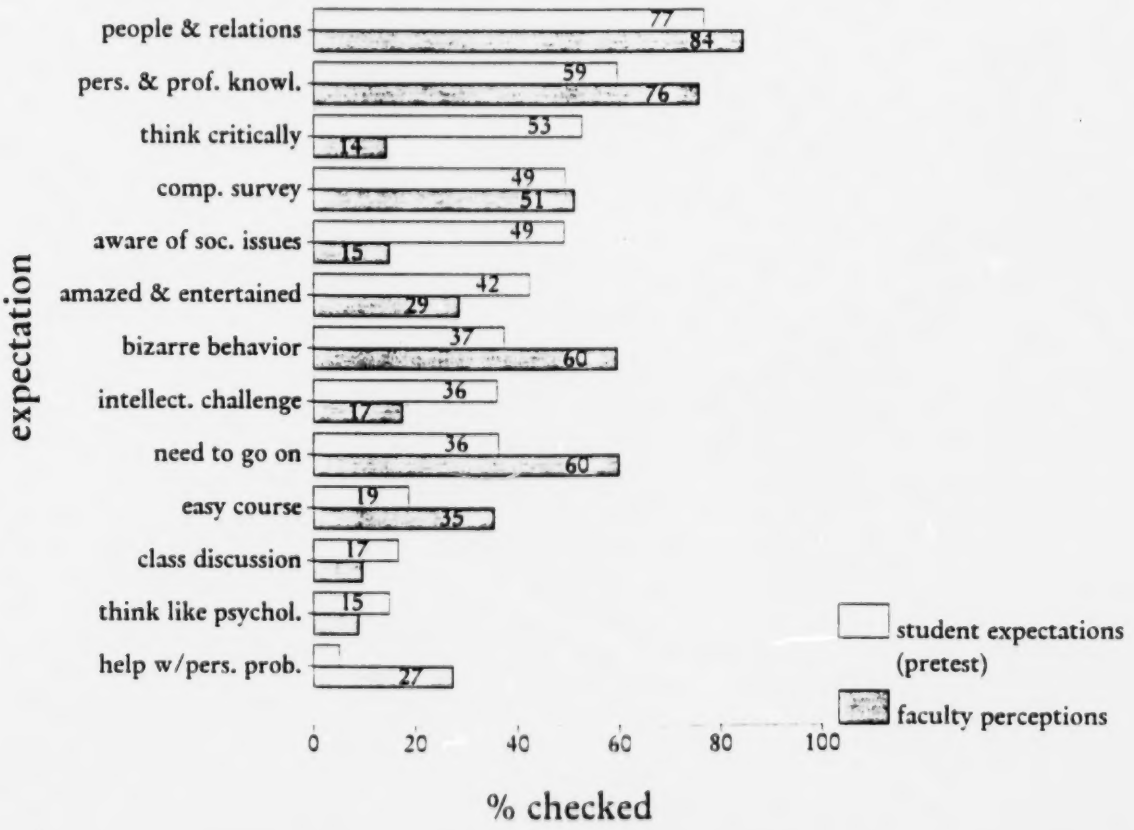
3. increase understanding of people and relationships
   learn things of use in personal and professional life
   increase awareness & knowledge of important social issues
   learn to think critically about ideas and data

4. opportunity to use own knowledge in discussion
   to be intellectually challenged

Two expectations -- help with personal problems and a survey of the field -- did not cluster with anything else. Cluster 1 reflects preparation for a major in psychology. Cluster 2 reflects a student who does not expect to take the course seriously. Cluster 3 reflects a number of pragmatic goals. Cluster 4 is hard to characterize.

In the faculty survey we had given instructors the list of expectations that had appeared in the student questionnaire and asked them to check those they thought were held by a majority of their students. We compared these responses with those from the student survey, as shown in Figure 4.

Figure 4. Student expectations and faculty perceptions



Faculty correctly predicted that students' most widely shared expectations are that they will increase their understanding of people and relationships and that they will learn things that will be useful in their personal and professional lives. Faculty substantially underestimated students' expectations that they will learn to think critically, become more knowledgeable about social issues, be intellectually challenged, and be entertained, amazed, and surprised. They overestimated the extent to which students expect that they will learn what they need to go on in psychology, that they will learn of bizarre and aberrant behavior, that the course will be easy, and that they will learn things which help them with personal problems.

References

Alper, J. (1993). The pipeline is leaking women all the way along. *Science, 260*, 409-11.

Culotta, E. (1990). Can science education be saved? *Science, 250*, 1327-30.

Gibbons, A. (1992). Minority programs that get high marks. *Science, 258*, 1190-96.

Hoke, F. (1993). Study sees alarming science undergrad dropout rate. *The Scientist, 2(2)* Jan 25, 1993.

Massey, W. E. (1992). A success story amid decades of disappointment. *Science, 258*, 1177-79.

Travis, J. (1992). Reading, writing, arithmetic... and microbes? *Science, 258*, 1299-1300.

GETTING STUDENTS INVOLVED THROUGH A "CURRICULUM OF QUESTIONS"

ANN L. SALTZMAN, PH.D.
DREW UNIVERSITY
MADISON, NJ 07940

GETTING STUDENTS INVOLVED THROUGH A "CURRICULUM OF QUESTIONS"

The students at Drew University are, on average, a bright lot. Each year several Merit Scholars matriculate. "Drew Scholars" graduate in the top 1% of their high school class and score above 1300 on the SAT exams while the modal SAT score is in the 1160 to 1180 range. Yet, within the classroom, many of these same students assume a passive and non-questioning stance. There is a willingness to accept what is written or what is said because the source of the information is perceived to be an authority (a professor or textbook author). Belenky et al. (1986) identify this epistemelogical stance as one of "received knowledge;" that is, students take-in and reproduce knowledge without questioning or arguing with either the authorities or the knowledge base itself.

As a teacher who would like to hone critical thinking, I am frustrated by this passive stance. Over the years, I have "experimented" with a variety of approaches and techniques aimed at pushing students to become more active learners. This paper describes one such technique which I have successfully used in a Seminar in Social Psychology. I first describe the approach which I call a "curriculum of questions;" next I summarize students' evaluations of it and finally I present my own assessment.

THE "CURRICULUM"

The "curriculum of questions" builds on a suggestion first put forth by Neil Postman and Charles Weingartner in their classic 1969 book, Teaching as a Subversive Activity. Their analysis suggested that student passivity and resistance to active learning in public schools can be subverted through the use of student (not teacher) questions. Indeed, they proposed that set syllabi be discarded and that student curiosity and interest define both educational process and structure. While I am not (yet) prepared to discard a pre-set syllabus, I have "experimented" with their proposal by making student questions an important component of the course experience.

The Social Psychology syllabus, which is distributed on the first day of class, includes a statement of the purposes of the course along with a list of required readings, course assignments and the course schedule. Four course goals are identified: (1) to introduce the student to the principles and methods of social psychology; (2) to facilitate students' critical reading of social psychological (and hopefully all psychological) literature; (3) to advance the student's ability to apply social psychological findings to critical social issues; and (4) to add to the student's knowledge about self in a social world. In order to achieve these goals, students are required to come to each class session with a list of "thought questions" generated from the reading for the day. These lists are collected and

returned to students at the next class meeting, replete with my answers and comments. Questions and responses are collected in individual manilla folders labelled with students' names. At the beginning of each class meeting, these folders are distributed allowing students to read my responses to their previous questions. At the end of the class session, they insert their new questions into the folders and return them to me. Over time, the question-response format develops into an individualized dialogue between each student and myself.

The personalized nature of this dialogue has several pedagogical benefits. First, it allows students to find out more about the issues which are of most interest to them. Second, it allows me to detect points of misunderstanding which students may have. For example, one article which we read is Sandra Graham's 1992 piece, "Most of the subjects were white and middle class: Trends in published research on African Americans in selected APA journals," in which she describes the decline in published research where African-Americans serve as subjects. In response to this article, one student wrote

> I found it very interesting that the articles on racial attitudes of whites towards blacks were not included in the study. They were seen as "less central to the analysis, which focused on the subjective experiences of the Black research participants."

It is clear that this student did not understand the purpose of Graham's analysis and that white attitudes towards blacks did not meet the criteria set by Graham--that African-Americans be the research subjects. (In fact, the student's comment makes African-Americans the *objects* not the subjects of the research). The question-response format allowed me to correct the student's misunderstanding in the privacy of our "correspondence." It is important to note that a number of students also misunderstood Graham's point. As a result, I addressed the issue in class. Public uses of students' questions are discussed in more detail below.

A third pedagogical benefit of the question-response format relates to the personal nature of the questions. Many topic areas within Social Psychology lend themselves to personal introspection. Thus, some students begin to pose questions as a way to explore personal (and sometimes intimate) areas of concern: how do I present myself to others?; do I disclose too much or too little?; is my relationship with my boyfriend(girlfriend) one of equality or equity?; why do I stay in this relationship if it doesn't satisfy me?; how susceptible am I to the social influence processes of compliance, conformity and obedience? I, in turn, try to answer their queries in a non-judgmental way and to refer them back to theory or research which I think will be helpful for them. In some cases, depending on the nature of the question, I share my own experiences with the issue under discussion. By so doing, the student-faculty

relationship is transformed from one of distance and formality to one of alliance and mutual exploration.

The public uses of student questions

In addition to the one-on-one relationship which is established through the private "correspondence" between student and teacher, students' questions can become the focus of class discussion. This can occur in a variety of ways. First, student questions can reveal common points of misunderstanding. This is the case discussed above.

Second, there are times when students ask the same question or a variation of that question. Here, the common question usually represents an emergent concern of the class. Focusing class discussion around this concern then becomes a way in which student interests "lead the way." For example, in response to Richard Majors' concept of "cool pose" (Freilberg, 1991), where Majors proposes that African-American men adopt a style of self-presentation which communicates toughness and hyper-masculinity in reaction to a blocked opportunity structure and which Majors sees as problematic, several students asked if other (non-African-American) men who faced socio-political-economic barriers might also utilize "cool pose." Bringing this question to the "public domain" of class discussion allowed students to explore the interaction between race, class and gender using a concrete example. The instructor can then gently steer the discussion by highlighting theoretical considerations, thereby enhancing student comprehension and helping them to

refine their analysis.

Different from a frontal lecture format of distance and formality, the question-answer approach encourages a class dynamic of greater equality between students and teacher. This is especially the case in class sessions where the entire period is devoted to student questions. Sometimes, I start by asking students what they have questions about and then encourage them to answer each other's questions. At other times, I prepare a hand-out of student questions, selected from the previous day's assignment, which are arranged in such a way that one entry answers the previous question. Students' responses to Chryssi Inglessi's (1990) article on the life-story approach as feminist methodology serves as a nice example of how this works. The first entry below raises the question about Inglessi's rejection of the use of questionnaires with pre-set questions. The capitalized sentence illustrates the way in which I graft technical concepts (e.g. construct validity, internal validity, etc.) onto students' concerns:

> What exactly what Inglessi trying to solve that the questionnaires were not at all helpful? What could they not provide for her? [THIS IS A QUESTION RELATED TO CONSTRUCT VALIDITY.]

This question was followed by a second one which answers the first but then poses a new one. Again the capitalized sentence indicates how I enter the dialogue:

[THIS RESPONSE ANSWERS THE QUESTION ABOUT CONSTRUCT VALIDITY BUT RAISES A QUESTION ABOUT INTERNAL VALIDITY.] I understand that the life story or biographical method avoids structured prefabricated questions and the imposition of the researcher's point of view ... it gives the researcher the advantage of gathering information that the subject herself organizes. One disadvantage is that the material is up for multiple interpretations. At one point, Inglessi said that she "juxtaposed narrations" so they made a dynamic whole. How does this increase validity?

Finally, in contrast to a common question (or comment) which emerges from a given article, there are times when students have opposing responses to the same article. A case in point is what I call "The Bem Debate," an assortment of opinions (sometimes diametrically opposed) to Sandra Bem's (1983) article, "Raising gender aschematic in a gender schematic world." By reproducing them on a sheet which is then distributed to the whole class, students begin to appreciate the diversity among themselves.

The issue of diversity is an important one on contemporary college campuses. Mutual respect and understanding can be enhanced by allowing students to "peek into" each others' private thoughts and reactions. The following excerpts represent responses to material on

minority identity issues. It is important to note that, with regard to these more personal entries, I obtained permission to reproduce their comments for "public consumption:"

> I sympathized very much with the conversation about the struggle to maintain one's ethnic identity. Growing up in America as a Turkish Muslim proved very challenging, painful and lonely. For most of my life, up to my freshman year in college, I shunned my heritage and faith as my only possible escape from the overwhelming intolerance and ignorance of people of the Islamic faith. Only recently was I able to come to terms and realize the beauty and compassionate nature of my religion. I resent the fact that such prejudice is so prevalent and yet so seldom addressed.
>
> * * * * *
>
> I was interested in the process of Nigrescence. The whole idea of going through the process of being against a group to which you belong, then exploring the group, then immersing oneself in the group and finally identifying and being comfortable with the group and yourself in reference to the group was interesting. This explains almost any group that is discriminated against ... the first step in coming out as gay,

lesbian or bisexual is coming out to oneself and this process is almost always following the roadmap that is described by the article on nigrescence. I guess it is true that one can see bits and pieces of one's identity in others and incongruencies that force one to rethink one's identity.

* * * * *

Perhaps I can understand these articles by looking at them from the perspective of a member of a minority (or non-culturally dominant) group. I'm not really referring to my ethnicity or my religion or my gender, but rather my beliefs regarding the abortion issue. "Right" and "wrong" of my beliefs and others' belief set aside, my belief that abortion is wrong is not part of the cultural majority. I am currently trying to make a decision about whether I should state that I am an officer in Drew Pro-Life on my resume (it could hurt me when it comes time to being hired). So do I deny (or at least omit) my "voice" or myself in order to avoid being discriminated against? (I've never really thought of this issue in this way before.) This issue in my life seems to be the springboard by which I can understand (at least in part) the articles on African-American identity.

STUDENT EVALUATIONS OF THE "QUESTION-RESPONSE" FORMAT

In general, students liked the "question-answer" format. Five benefits, which are listed on Table 1, emerged from their end-of-semester evaluations.

Insert Table 1 about here

The following excerpts illustrate these benefits:

> The best thing about it is it forced me to do the readings when assigned--and to read them carefully. Otherwise I have a tendency to put things off. This would have made class discussions mean nothing to me; for midterms and finals, I would not have done well. When it came time for exams, because I had done the readings and participated in discussions, all I really had to do was review.

* * * * *

> The questions were beneficial because it helped me to be creative and analytical about many things learned in class. It was also interesting to see how the professor responded to the questions. The questions help you think critically. They helped me to learn more about myself and the world at large.

* * * * *

> I loved everything about this approach. It forced me to keep up with the readings and to begin to analyze and question the material on a deeper level. The feedback written alongside the questions was like an extended dialogue both inside and outside the classroom.

Students also indicated aspects of the question-answer format which they did not like. Thirty-nine percent said that they couldn't always think of a question. This was especially so at the beginning of the semester. Consistent with students' general non-questioning stance, many did not know how to generate a "thought" question as distinct from a "study" question (e.g., define, compare and contrast, review). In order to help them understand the kind of analysis I was looking for, I would reproduce (and distribute) critical questions raised by their peers. Unfortunately, I also learned that some students fabricated question in order to meet the requirement:

> The distinct disadvantage of the question/summary approach was that it, at times, forced me to write questions when I really had none. This lead to making up questions for the sheer purpose of making up questions. The graded class participation forces this question-making process even when there aren't questions.

Another criticism, rendered by 26% of the students, was that the questions should not be due at every class session. Recommendations suggested that they be due once a week. Finally, 18% complained that the question-answer format entailed too much time, reading and effort.

Should the approach be continued?

Ninety-two percent of the students recommended that I continue to use the approach. Half of these felt that no modification was needed. The other half suggested some modifications which I have since incorporated into later versions of the curriculum (e.g., allow students to write responses to the readings and not only raise questions). Table 2 includes excerpts from both groups of students. Only 4 (out of 62) students recommended that the approach be discontinued.

Insert Table 2 about here

INSTRUCTOR'S ASSESSMENT

I have found this approach to be very exciting. As the student data document, it has encouraged active class participation and critical thinking. It has enabled students to learn from each other and it has allowed them to make more personal connections with the material. In addition, it has allowed me to get to know the students better just as it has allowed them to know me better. We

are no longer just roles, "student" and "professor," but individuals united by a common goal of understanding Social Psychology, ourselves and each other.

I would also have to agree with the students that this is a VERY time intensive approach. It only works if student questions are answered in a timely fashion. One cannot "stockpile" questions and expect students to continue to read critically and carefully. Hence, I would not recommend this approach for instructors with large classes. Nor would I recommend it for teachers who do not have the temperament or motivation to spend hours thinking and responding to student questions. However, for instructors who do have this temperament and motivation, the approach yields a richness of thinking, feeling and relating, which in the experience of this teacher, rarely emerges in a lecture hall. Through the technique, learning becomes an activity defined by the passion to know rather than by the expediency of absorbing pre-defined knowledge.

REFERENCES

Belenky, M.F., Clinchy, B.M., Goldberger, N.R. & Tarule, J.M. (1986). Women's ways of knowing: The development of self, voice and mind. NY: Basic Books.

Bem, S.L. (1983). Gender schema theory and its implications for child development: Raising gender-aschematic children in a gender schematic society. Signs, 8, 598-616.

Freilberg, P. (March 1991). Black men may act cool to advertise masculinity. APA Monitor, 30+.

Graham, S. (1992). Most of the subjects were white and middle class: Trends in published research on African-Americans in selected journals, 1979-1989. American Psychologist, 47(5), 629-639.

Inglessi, C. (1990). Advocating a biographical approach to feminist research: A personal experience. Wellesley, MA: Center for Research on Women (Working Paper #215).

Postman, N. & Weingartner, C. (1969). Teaching as a subversive activity. NY: Delta.

Table 1

Summary of Students' Evaluations of the Question-Response Approach

What students liked	Number (n=62)
It forced me to keep up with the readings.	35 (56%)
It helped me to think critically and actively.	35 (56%)
It facilitated class discussion.	17 (27%)
I liked the feedback from the instructor.	17 (27%)
It allowed me to make personal connections with the material.	13 (21%)

Table 2

Student responses to the questions, "Would you recommend that I continue using this approach with future classes? Any constructive suggestions for change?"

Answer with commentary	Number (n=62)
Unqualified "Yes" to continue	29 (47%)
"You should continue since it gives personal accounts and interesting information about the topics/subject matter. We saw issues from other dimensions through others' comments."	
Qualified "yes to continue	28 (45%)
"It should be questions/comments on the readings to allow free thought and responses instead of trying to make up questions just for the sake of making up questions."	
No	4 (5%)
"No, because the good, caring students will bring questions to class anyway. These questions will be either mentally noted or jotted down in a notebook. I found that most of my <u>real</u> questions were generated through class discussion anyway."	

Four Activities to Enhance Student Learning and Involvement in an Interdisciplinary Course in Psychology and Art

J. Craig Clarke, Ph. D.
Department of Psychology
Salisbury State University

and

Kent N. Kimmel, Ph. D.
Department of Art
Salisbury State University

Four Activities to Enhance Student Learning and Involvement in an Interdisciplinary Course in Psychology and Art

Our presentation involved four classroom activities used in an interdisciplinary course in psychology and art. The activities were intended to enhance both student learning and student involvement in the course, and to bridge the gap between our primary populations of psychology and art students.

Specifically, the four activities were (a) creation and critique of an art work, (b) subjective ratings of painting reproductions, (c) interviewing and then adopting the perspective of another student while visiting an art gallery or museum, and (d) class presentation of students' course projects.

We present each activity in the form of a manual for conducting the activity. We should also note that our psychology and art course met weekly for one three-hour session, which allowed us the flexibility to schedule some rather time-consuming activities and to facilitate some extended class discussions.

Activity 1: Creation and Critique of an Art Work

The activity was conducted during the first class period of the semester and served several purposes. First, it gave students from

different disciplines an opportunity to work together and get more familiar with one another. Second, it gave the psychology students an opportunity to create and critique an art work. And third, it gave art students the opportunity to see one way in which artistic creations can be scientifically evaluated.

Participants

Students were assigned to groups of three members that cut across academic disciplines.

Materials

Each group was given a large white piece of paper and an envelope containing four different shapes and the name of a primary emotion. The shapes were cut from standard construction paper and differed in color (the four primaries), complexity (few *vs.* many-sided), and physiognomic characteristics (angular *vs.* rounded). For example, the simple, rounded shape looked like an egg and appeared in each of the four colors. The emotion names included joy, acceptance, fear, surprise, sadness, disgust, anger, and anticipation. No two envelopes contained either the same shapes or emotion name.

Procedure

Each group was instructed to produce an art work to illustrate or visually define the emotion name in their envelope. Groups were not

allowed to discuss their work or to interact in any way.

In producing the art work, students were required to use a total of four shapes and to attach them to the large white paper. The backing color was not considered part of the design. The shapes could be overlapped or cut to interlock, but could not be cut or folded in any manner that changed the original shape. Also, the shapes could not be used to construct a three-dimensional work. The groups were allowed to trade shapes, on a one-for-one basis, from a limited pool of shapes. Approximately 30 minutes were allotted for the creation of the art works.

Following creation of the art works, each was critiqued according to how well it visually defined an emotion. The works were displayed around the classroom, and students were asked to indicate what emotion each was attempting to demonstrate. To focus decisions, the students were given a list of eight emotion names from which to select. We tallied the responses for each art work to determine how successful it was in displaying its particular emotion name.

During the critique period, students discussed various aspects of the activity, including difficulties in visually defining emotions with the limited materials available, why some emotions were easier to display than others and why certain art works were more successful than others, how different emotions are related to one another, and how the various characteristics of

the shapes (color, complexity, and physiognomy) were related to emotions. The critique and discussion lasted approximately one hour.

Suggested Background Readings

Berlyne, D. E. (1971). *Aesthetics and psychobiology*. New York: Appleton-Century-Crofts.

Lindauer, M. S. (1984). Physiognomy and art: Approaches from above, below and sideways. *Visual Arts Research, 10*, 52-65.

Plutchik, R. (1994). *The psychology and biology of emotion*. New York: Harper/Collins.

Activity 2: Subjective Ratings of Painting Reproductions

The activity served several purposes and required parts of several class periods. We collected the ratings during our first class meeting (thus exposing the students to perhaps the most common form of research in experimental aesthetics), discussed the methodological aspects of such data collection two weeks later in a lecture on research methods (using data and procedures relevant to the students), and then used the same materials later in the semester when discussing cognitive aspects of responses to art (comparing the students responses to those in the research literature).

Participants

During a class meeting each student was asked to rate a series of painting reproductions.

Materials

Forty photographic slides of paintings were randomly selected from the populations of paintings described by Shortess and Clarke (1988).

Procedure

Using a thirteen-point rating scale, the students were asked to rate each work for how good an example it was of the category *paintings*. This procedure is similar to that used in the study of prototypicality by others, such as Rosch and Mervis (1975) and Clarke, Seay, Shortess, and Richter, (1987). We feel that it is essential that the instructions indicate in detail what is meant by a good example or prototype. Examples including apples or oranges for the category fruit are helpful. The rating scale ranged from 1= a very poor example to 13=a very good example. Each work was presented for 15 seconds, and students were asked to wait about 10 seconds before indicating their ratings. Following completion of the ratings all data forms were collected and the results were analyzed.

The analyzed results were presented during our class on research methods. We focused on the methodological issues of stimulus selection procedures and randomization, the comparison of correlational and experimental research procedures, as well as on the development of rating scales. Each student was given a report of the results including the mean ratings for each of the forty paintings. We also compared the responses of our art and psychology majors, and showed the relationships of the

typicality ratings to other ratings such as liking, familiarity, realism and complexity from the Clarke *et al.* (1987) study. Any of these rating scales could be used for an alternate class activity.

Later in the semester we referred to these data during our discussion of cognitive categories in aesthetics as described by Martindale, Moore, and West (1988) and others.

In addition, we demonstrated difficulties in recognition memory (i.e.,distinguishing between an earlier presentation in the course and general experience) by presenting a subset of the original forty reproductions along with a group of reproductions not previously shown in the course. Similarly, we were able to demonstrate the difficulty of correctly determining the left-right orientation of paintings by asking students to judge whether a slide reproduction of a painting was presented in its normal or mirror-image orientation.

Suggested Background Readings

Clarke, J. C., Seay, M. B., Shortess, G. K., & Richter, M. L. (1987). Paintings: A natural category. Paper presented at the Annual Meeting of the Eastern Psychological Association, Arlington, VA.

Martindale, C., Moore, K., & West, A. (1988). Relationship of preference judgments to typicality, novelty and mere exposure. *Empirical Studies in the Arts*, *6*(1), 79-96.

Rosch, E. H., & Mervis, C. B. (1975). Family resemblances: Studies in the internal structure of categories. *Cognitive Psychology*, *7*, 573-605.

Shortess, G. K., & Clarke, J. C. (1988). Properties of a population of art works in experimental aesthetics. *Visual Arts Research, 14*, 1-12.

Activity 3: Interviewing and Adopting the Perspective of Another Student While Visiting an Art Gallery or Museum

The purpose of the activity was to help students to think critically about their behavior when visiting art galleries and museums. To accomplish this goal we modified an exercise entitled "Examining Multiple Perspectives" described by Stout (1992) by asking each student to take the perspective of another student when visiting an art gallery. We required a written report of the student's experiences.

Participants

Each student was asked to select another member of the class who differed in as many ways as possible, and to interview that student concerning his or her behavior in an art gallery or museum.

Materials

Students were provided with a form containing the following interview instructions and suggested questions.

"Find a member of the class who is as different from yourself as possible, (e. g., a different major, gender, age, race). Interview this person using the following list of 'suggested' questions. You may add to or vary questions on the list to suit your particular viewing habits. Record the responses that your partner makes to each question. Using the list of responses, go to an art exhibit and look at it 'through your partner's eyes.' Record responses to the exhibit as if you were the other person. When you have concluded your gallery visit and recorded the responses,

present a typed paper (double spaced) in which you compare/contrast your own responses to the exhibit to the responses of your partner.

Suggested Interview Questions.

1. What preconceived notions do you have about attending an art exhibit?
   a. Do you attend because the exhibit is familiar?
   b. Do you attend because the exhibit is unfamiliar?
   c. Do you attend because you think that an educated person is supposed to be involved in such an activity?
   d. Do you attend for personal reasons or because of peer influence?
2. How do you react/respond upon entering an art exhibit?
   a. How aware are you of the total exhibition space? of the lighting?
   b. Do you generally walk through an exhibit in a specific direction (e. g., do you generally move clockwise or counter-clockwise)?
   c. Do you walk through an exhibit looking at the works in a "random" fashion?
   d. Do you look at two-dimensional and three-dimensional works separately or in the order in which they are presented?
   e. Do you enter an exhibit looking for the order/direction established by the gallery or curator?
   f. Is your movement through an exhibit influenced by the direction that other people are moving (e. g., do you move with others or do you look at works when there are fewer other viewers?)
3. In looking at individual art works, how do you physically and cognitively react/respond?
   a. Do you walk through an exhibit at a distance of ten feet or more to get an overall view of the art work?
   b. Do you stand close to the art work? When?
   c. Do you read the title card before or after you look at the art work? or at all?
   d. Is the title important to your impression or understanding of the art work?
   e. Do you like to know the name of the artist who produced each work, or do you prefer to "understand" the artist through the media, technique or subject

matter presented?

f. To which of the following factors do you respond? In what order? (Prioritize only those factors to which you respond.)
   1. The overall "appearance" of the work: ____
   2. The name/reputation of the artist: ____
   3. The title of the work: ____
   4. The technical handling (drawing/painting/sculpting): ____
   5. The subject matter/content: ____
   6. The media used (ink/paint/clay/wood): ____
   7. The framing or base/stand: ____

g. When viewing an individual art work, to what extent do you respond to the structure of:
   1. the "elements" of the composition (e. g., lines, shapes, textures, colors)?
   2. The "principles" of the composition (e. g., unity variety, balance, emphasis, illusion of space, illusion of motion)?

h. How do you respond to art works that are untitled?

i. How aware are you, generally, of the lighting of individual art works? Are you aware of differences in lighting two-dimensional and three-dimensional art works?

4. While you move through an art exhibit, how do you react/respond to activity in your immediate environment?
   a. Do you prefer to look at art works alone? with another? others?
   b. Do you prefer to keep your opinions about a particular work or the exhibit, as a whole, to yourself or to share it with others?
   c. Have you or would you use a prerecorded audio tape describing selected art works as you walk through an exhibit?'

Procedure

Students were asked to conduct their interviews with one another outside of class. They were allowed to attend the art exhibit of their

choosing, and were given roughly one month to complete the activity and accompanying written report.

On the day that the reports were due we scheduled approximately one hour of class for a discussion of the students experiences. We feel that this discussion is quite beneficial for two major reasons. First, students come very prepared and very willing to talk about their experiences, thus producing a rather lively and animated discussion. Second, it further expands our stated goal of examining multiple perspective since each student has a chance to hear from every other member of the class, not just his or her partner.

Suggested Background Reading

Stout, C. J. (1992). Critical thinking and micro-writing in art appreciation. *Visual Arts Research, 18,* 57-71.

Activity 4: Class Presentation of Students' Course Projects

The purpose of the course project presentation was for the students to manifest some aspect of visual perception by developing a formal public presentation, which could involve an artistic/creative effort or the collection and discussion of empirical data. The projects were required to be an extension of or related to some topic covered in the course.

The presentation of the students' course projects was worth approximately 35% of each student's course grade, with all members of a

given group receiving the same project grade.

We attempted to increase student involvement in all aspects of the course project presentations by (a) requiring students to submit written project ideas for class discussion very early in the semester, (b) allowing students to select their own project topics and to determine the constitution of their own project groups, and (c) permitting students to set the parameters for the evaluation of their project presentations.

Participants

Students formed groups of approximately three members based on common interest in the project topic. The allocation of responsibilities within groups, as well as the various roles adopted by group members, was determined by each group.

Materials

The only materials provided by the instructors was a copy of the project evaluation form. Students could set the relative weight of the five evaluation criterion. The five criteria were (a) the use of allotted time, (b) the involvement of students in the class, (c) the quality of demonstration materials including instructions, handouts, etc., (d) the clarity of demonstration materials including instructions, handouts, etc., and (e) the clarity and organization of background materials and explanations. With the exception of use of time (all groups were expected to develop

presentations conforming to the allotted one hour), the weight of each criterion could be determined by the group to reflect the specific purpose or intent of the project. For example, one group may have used few demonstration materials for their projects and therefore have chosen to lower the relative weight of that criterion, while another group may have preferred to emphasize the involvement of students and therefore have chosen to raise the weight of that criterion. To insure that all five criteria were applied to each presentation we set the lowest possible weight for each of the five criteria at ten percent.

Procedure

Students provided written lists of project ideas during the second class period. The ideas were discussed in class so that common interests could be discovered. Although we did not set interim deadlines for the development of project ideas, we did include discussions of the projects and their progress during several classes over the course of the semester.

The actual project presentations took place during the final two classes of the semester. The order of presentations was randomly determined with each group allotted one hour for its presentation.

As with all student presentations the quality of the work has varied considerably. Most groups seem to have found the use of five specific criteria helpful and seem to like the opportunity to tailor the criterion

weights to their individual presentations.

Conclusions

We believe that the four activities described here were quite effective in helping us achieve our two goals of enhancing student learning and involvement, and of bridging the gap between psychology and art students. However, the four activities by themselves could not have achieved our goals. They should be viewed within the context of an overall course plan in which the selection of course topics, the methods of presentation, the use of invited speakers and films or videos, the methods of evaluation, even the scheduling and timing of class meetings was intended to help achieve our course goals.

Robert P. Cavalier

Elmira College
Elmira, New York

Sports Psychology - An Applied Theoretical Approach

The spring term at Elmira College provides an unusually advantageous structure for a 6 credit undergraduate course in Sports Psychology combining both classroom and field activities. Classes meet 4 days each week over a six week period which allows a highly interactive experience for students both in the classroom and on the playing field.

Theory in sports psychology is systematically developed in the classroom and then it is brought onto the playing field which serves as a clinical experience for each student in the application of theory. Experienced athletes and coaches worked with the students in illustrating how theory "comes alive" on the playing field. Students were provided with a means of assessing the impact of different theories (e.g. aggression theory, attribution theory) by building self-assessment instruments in class and then using these instruments after each sporting event to measure how different theories apply to both teams and individual players.

The self-assessment instrument served, therefore, the dual purpose of describing the theory in terms of assessment statements and questions (done in class) and then using the instrument to "test out" the theory during a sport contest. In this way the student stayed focused on the theory in question by designing the instruments and examining its applicability to the sport being played. This was an authentic clinical experience for each student since teal games were played by all participants. The games included softball, basketball, volleyball, field hockey, and bowling. A textbook in sport psychology was used, and a reading list provided. There were 3 examinations and a team research project in addition to the field activities. Varsity athletes and coaches assisted the instructor in all phases of the course including lectures and discussion leadership.

Course evaluations were very positive. Students commented especially on the value of seeing theory work in the field.

Personality, Teaching Style, and Learning Style

Francis B. Colavita, Ph.D.
Department of Psychology
University of Pittsburgh
Pittsburgh, PA 15260

Personality, Teaching Style, and Learning Style

by

Francis B. Colavita, Ph.D.

There is no single personality type exclusively associated with being an effective teacher. However, it is certainly true that one's teaching style is influenced by one's personality. From the student's perspective, learning style is also influenced by personality.

The four dimensions of psychological types identified by Carl Jung (1923), i.e. Extraversion vs. Introversion (E-I), Sensation vs. Intuition (S-N), Thinking vs. Feeling (T-F), and Judging vs. Perceiving (J-P) are presumably measured by the Meyers-Briggs Type Indicator test. These dimensions have been used to characterize and understand behavioral and attitudinal differences between people in situations ranging from the work place to the marriage bed.

The purpose of the present paper is to consider the possibility that there is important information to be gained from exploring personality differences between teacher and student in the classroom. More specifically, it is our belief that personality differences between teacher and student, even in large lecture classes, can have significant implications for the learning process.

While all four of the above mentioned personality dimensions undoubtedly influence teaching and learning style, the present pater will be concerned only with the Sensation-Intuition (S-N) dimension. This dimension describes one's preference for relating to the world either concretely by assimilating specific facts and details about the here and now, or intuitively, by operating on hunches, being concerned with future possibilities, and possibly ignoring specific facts and details.

The present investigator completed an abbreviated version of the Meyers-Briggs test, and scored quite high on the Sensation dimension. One may assume that in the absence of motivation to do otherwise, lectures given by a high S instructor, and examination questions made up by such an individual, would include a great deal of fact and detail, and be less concerned with overviews, innovative interpretations, and future possibilities. Such an instructor might inadvertently be stacking the deck against a high N student (it is also possible that a high N instructor may present special difficulties for a high S student, but this issue will not be addressed in the present paper).

To test this possibility, 53 students in an undergraduate Sensation and Perception class were asked to fill out the abbreviated version of the Meyers-Briggs test and turn it in with their names on it, after taking the final examination. Participation was voluntary, and course grades were awarded before the surveys were examined.

Twenty-three students chose not to turn in a survey, yielding an N of 30. These 30 students were sorted into three categories, those categories being designated as S (N=14), N (N=11), and X (N=5), where the X category represented no clear preference on the S-N dimension. Course grades were represented on a scale ranging from 0 (F) to 4.25 (A+), and a mean numerical grade was calculated for each of the three groups. The mean grades were 3.2 for the S group, 3.0 for the N group, and 3.0 for the X group.

These data suggest that the teaching style of a high S instructor is most compatible with the learning style of a high S student. If the data of the present study hold up under future replications (which we intend to carry out) it will suggest that it is important for both teacher and student to be aware of their personality style. As a result of possessing this information, both teacher and student can extend themselves in the appropriate directions to maximize the learning process. For instance, a high S instructor might make more of an effort to go beyond merely presenting facts and details and include more theoretical, future oriented overview type material. Similarly, a high N student might work to overcome his or her tendency to ignore specific details. A high S instructor might well work to include some examination questions that suite an N-type approach to the subject matter, while a high N student might recognize the importance of incorporating some S-type behaviors into his or her test preparation.

To summarize, the possibility exists that the learning process can be maximized if both teacher and student are aware of their personality types, and of how personality type can influence teaching and learning style.

USE OF LEARNING GROUPS FOR ACTIVE LEARNING

David Wheeler, Ph.D.

Robert Morris College
600 Fifth Avenue
Pittsburgh PA 15219-3099
wheeler@robert_morris.edu
(412) 227-6469

Abstract: A Base Learning Group is a diverse group of students who are responsible for the learning of the group members for the entire semester. This differs from other collaborative learning strategies since the students are assigned to the groups for an entire semester and are responsible for the division of labor among group members. The Base Learning Group uses peer pressure to motivate students, uses the better students as group leaders to help poorer students with their learning, and provides peer support for every one in the classroom. Tasks appropriate for Base Learning Groups include term projects, jigsaw reading, two-minute questions, and group tests.

INTRODUCTION

A Base Learning Group is a diverse group of four to five students who are responsible for the learning and academic success of the other group members for the entire semester. This responsibility is used to help motivate the students to do more work and take more responsibility for their learning. Membership in the Base Learning Group is assigned by the instructor to assure diversity among group members. Once assigned, students are in the group for the entire semester and cannot be removed for poor performance--only for nonparticipation.

GOALS FOR BASE LEARNING GROUPS

HAVE A PEER SUPPORT GROUP IN THE CLASS. Every member of the class is assigned to a group. This way, all students know a few other people in the class to assist them when necessary. Ways that students use the Base Learning Group for peer support include: discussions of how to study, sharing of textbooks, sharing notes, getting caught up when they have missed a class, and general social interaction.

HAVE THE BEST STUDENTS ASSIST IN THE MOTIVATION AND TEACHING OF THE POORER STUDENTS. Base Learning Groups should be an academically diverse group of people. There should be at least one person with a grade point average of 3.0 or higher in a group. Group leaders are choosen from the students with a grade point average of 3.0 or better. The academically better students help the academically poorer students structure their studying by assigning them specific tasks on a specific schedule. Additionally, on group exams, the better students help the poorer students complete the exam, usually with an explanation of the reasoning behind the answer.

USE PEER PRESSURE TO MOTIVATE STUDENTS TO WORK HARDER. The academically diverse group composition also increases the peer pressure on the poorer students to work more. It is essential that the tasks assigned to the students be amenable to division of labor. The groups divide up the task into smaller components so that no one person is doing the entire task. Every person in the group has to adequately complete their portion of the task or the entire group suffers. This puts peer pressure on the students to complete their tasks.

FORMATION OF GROUPS

DIVERSITY. Base Learning Groups should be formed with students who are as diverse as possible. Factors to consider for forming diverse groups include: grade point average, major, age, race, gender, skill proficiency, previous course work, and work experience. During the first class meeting, students are given a questionnaire which lists these factors. Previous academic performance is the most important variable. It is essential that the poorer learners be spread evenly throughout the class and that there be at least one good learner per group who will assist the instruction of the poorer learners. A diversity of skill proficiency is important when there is a major group project, such as a group research project. It is best if one student has good word processing skills, one has good writing skills, one is a good organizer, one knows statistical analysis, etc.

SIZE. Four or five people per group is the optimum size. Any larger leads to diffusion of responsibility. Any smaller places too much burden on each individual.

GROUP LEADERSHIP. It is essential that a group leader be assigned by the instructor to each group. Usually, the person with the highest grade point average is assigned as group leader. Sometimes, the student with the highest grade point average wants to disengage from the group because they are worried about lowering their grade point average. In this case, another high grade point average student is assigned as group leader. Although other leadership skills may be more important for other group projects, academic performance is considered the most important factor for group leadership in Base Learning Groups because the major responsibility of the group is the academic success of the group members, not the completion of specific tasks. Peer teaching is beneficial for the student being taught and for the student doing the teaching. Being group leader gives additional challenge to the academically better students.

It is necessary for the instructor to assign the group leader and not have the students elect a leader. There is often great reluctance on the part of the students with the highest grade point average to volunteer to be group leader. Often, the leader chosen by the students is popular but soft-spoken in not saying "No" loudly enough.

The formation of Base Learning Groups and the assignment of group leaders must be done in the first one to three hours of class before people have begun to develop an individual study pattern.

PROXIMITY. Once the groups are formed, the students in the Base Learning Groups should move so that they are seated adjacent to each other. This is required for the formation of a good peer support group.

PROBLEMS WHICH MAY ARISE

NONPARTICIPATION. There must be a written policy anticipating the occasional student who does not participate in the group. Any changes in group membership after the first two weeks of class are extremely disruptive. Students in the larger than average groups should be told when the groups are formed that one of their members may need to be moved if students from the smaller than average groups drop the class. Students should be removed from a group only if there is well-documented nonparticipataion in group activities or in cases of extreme interpersonal conflicts. Students should not be able to remove a student just because they are having academic difficulties. In that case, the reasons for poor academic performance need to be addressed by the instructor either individually with the student or jointly with the group. After week five, it is better to have a group of three people than to disrupt other groups.

PASS/FAIL STUDENTS. If there are students who have elected to take the class with a pass/fail option, they should be segregated into their own group. If there are not at least three of them in a class, then they should be assigned as an extra person in one of the other groups.

DISRUPTIVE STUDENTS AND FRIENDS. Breaking up cliques by assigning friends to different Base Learning Groups is usually effective in decreasing the frequency of disruptive behavior in the classroom. An effort should be made to separate friends so that people can have the experience of developing new friendships and working with a group of strangers. In a case where people express a strong desire to stay with their friends, it is better to let the friends stay together than it is to separate them.

TASKS APPROPRIATE FOR BASE LEARNING GROUPS

Base Learning Groups are especially effective for projects that lend themselves to division of labor.

SEMESTER PROJECTS. Projects such a group research project which are large enough in scope to require many weeks on the project are well suited for Base Learning Groups. Rick McCown (personal communication) at Duquesne University has developed a project in which the students publish a journal during the course of a semester. Every group develops a prospectus for a journal and tries to attract submissions from the other students in the class. Every student has to individually write a paper for submission to one of the other journals but the group helps by critiquing early drafts of the paper. Students then submit their papers to the journal they choose. The paper is reviewed by members of the group to which the paper was submitted. Papers are accepted, conditionally accepted, or rejected with suggested revisions.

TWO-MINUTE QUESTION. When the instructor asks the class a question but no discussion ensues, it is time to make it a two-minute question. Ask the groups to discuss the issue for two minutes. When the time is up, the instructor randomly chooses one or two groups to present their answer to the question. An effective two-minute question is to ask the groups, "What is this chapter about?" before lecturing on it. In two minutes, students are often able to scan the chapter and pick out the main points in an introductory psychology textbook.

JIGSAW READING. Reading assignments by the instructor are subdivided by the members of the group. Each person becomes an expert on their reading assignment and is responsible for explaining it to the others in the group. This works well with the group testing described below.

GROUP TEST FOLLOWED BY AN INDIVIDUAL TEST. On the first day of testing, students are given a 50 question multiple choice test which is taken by the entire Base Learning Group. The first 15-minutes are spent with each student answering the questions individually. Then answer sheets are handed out and the next 30 minutes the students are permitted to discuss their answers within the group. Individual answer sheets are submitted by each student to allow dissent from the group consensus. The following day, after reviewing the group test, the students are given a different 50 question multiple choice test which covers the same material and which is taken without any group interaction. The group test is worth 50% of the grade of the individual test.

This technique essentially makes the group test a motivated review for the individual test. There is a great deal of peer-to-peer teaching occurring during the group test as students try to justify their choices to the rest of the group.

Proctoring the group test is a little challenging but gives the instructor the opportunity to hear the students' thought processes. It is important to be sure that adjacent groups can not obtain the correct answers by listening to their neighbors reading a list of answers as they check their answer sheets. This can be accomplished either by physically separating the groups or, if space does not permit, producing four versions of the test which are distributed in a checkerboard pattern. It is best to keep all questions for a chapter together to make it easier to accommodate the jigsaw reading described above. While proctoring the group test, walk around and listen. Listen to the thought processes of the students. Listen for participation and nonparticipation of individuals. Look for cheating. The classroom becomes somewhat chaotic during the group test and extra vigilance for cheating is necessary.

Scores on the individual test can be used to indicate who is above the group mean and who is below it. This information, along with the impressions the instructor gets while walking around, can be used to determine if some individuals are being unfairly hurt by the group testing process and if some individuals are being unfairly assisted by the group testing process.

STUDENT ACCEPTANCE OF BASE LEARNING GROUPS

Students most like the interpersonal interactions and peer support provided by the Learning Base Groups. Additionally, they like the opportunity for division of labor on homework assignments. The long-term duration of the group provides for greater group cohesiveness. Sometimes, this group cohesiveness is used against the instructor to present demands that changes be made in the assignments and classroom management.

CONCLUSION

Base Learning Groups are an effective learning tool. Even if no group assignments are ever given, the peer support provided by the learning group is well worth the small effort necessary to set up the groups. When group assignments are given, there is a ready-made group structure allowing for the instantaneous use of collaborative learning projects in the classroom such as the two-minute question. Base Learning Groups are also an effective means of peer-to-peer teaching, especially in the context of group tests.

A Multimedia Course in the Psychology of the Arts[1]

Donald J. Polzella, Ph.D. and Gregory L. Brake

Department of Psychology

University of Dayton

[1] A version of this paper was presented at the 8th Annual Conference on Undergraduate Teaching of Psychology, Nevele Hotel, Ellensville, New York. March 16-18, 1994.

A MULTIMEDIA COURSE IN THE PSYCHOLOGY OF THE ARTS

Abstract. "Psychology of the Arts" explores the psychological processes that underlie artistic creation and perception. The course incorporates a Macintosh-based multimedia computer system, which can be used to create and present paintings, music, and a variety of visual and auditory interactive simulations.

PSY 375 "Psychology of the Arts" is a three semester-hour upper-level undergraduate course that attracts psychology majors as well as students from other disciplines across the University (e.g., music, art history, engineering). The course addresses three fundamental psychological questions: (1) What motivates the artist to create and the perceiver to contemplate works of art?, (2) What cognitive processes are involved in the creation and perception of art?, (3) What are the psychological and societal benefits of the arts?

The course covers the major arts--music, painting, and literature--as well as certain aspects of environmental design (e.g., architecture, interior design) and the relationship of art to mental illness. Course content is presented in terms of the theories, methods, and research findings in the fields of human perception and cognition. Covered topics include: (1) the scientific fundamentals of vision and audition; (2) the psychology of the artist and creativity; (3) perception of space, color, form, and pattern in painting; (4) perception of melodic, harmonic, and rhythmic structure in music; (5) vocal and verbal expression of emotion and meaning; (6) art, abnormality, and mental illness; and (7) theories of music and art appreciation.

The course makes use of computer-controlled audiovisual media including animations and interactive simulations. Such technology is uniquely appropriate to instruction in the arts, which are themselves expressed and contemplated through various media. The principal components of the computer system are listed below.

Apple Macintosh Quadra 700 - The Macintosh Quadra 700 is built around a 25-megahertz 68040 microprocessor. This specific machine is configured with 8 megabytes of RAM (expandable to 20 MB) and a 400 megabyte hard drive in order to run a variety of software and to store large graphics and sound files. The Quadra 700 is equipped to support 8-bit color (it can support up to 24-bit color with additional video RAM) and stereo sound, making it ideal for multimedia applications. The Quadra 700 is capable of supporting up to seven SCSI (Small Computer System Interface) devices.

Apple 16" High Resolution Color Monitor - This Apple monitor is supported by the Quadra 700. The 16" screen provides ample room for displaying visual information.

AppleCD 300 - this CD-ROM drive offers access to information stored on CD-ROM discs which can contain over 650 megabytes of information. In addition, this drive can be used to play audio compact discs through external speakers. The CD-ROM drive is connected to the Macintosh through a SCSI port as part of a SCSI chain.

Pioneer CLD-V2400 LaserDisc Player - The LaserDisc player connects to the Macintosh through a serial port (i.e., the modem port). The Macintosh controls the LaserDisc player which is capable for playing LaserVision disc, compact discs, as well as compact discs with video.

Sony Trinitron 13" Color Video Monitor - This high-resolution video monitor displays the images from the LaserDiscs.

Audio and video digitizing hardware and software -

1. MacRecorder is a sound digitizing input device with a built-in microphone. Digitized sounds are stored on disk, where it can later be edited using SoundEdit Pro.
2. VideoSpigot consists of hardware and software used to create digital movies. The VideoSpigot NuBus Digital-Video Frame Grabber is inserted in a NuBus slot in the Macintosh. This hardware allows images from a video source (including television, videocameras, video cassette recorders, and video laserdisc players) to be digitized and stored on disk.
3. Digital video images can be edited using Adobe Premier, which may be used to create still images of single art works (in PICT format) or digital movies of several art works (QuickTime format) from available laserdiscs. Both VideoSpigot and Adobe Premier support up to 24-bit graphics.

Hewlett Packard ScanJet IIc Color Scanner - this scanner is used to digitize art works which are not available on the videodiscs in the library. The ScanJet IIc digitizes images at a resolution of 400 dots-per-inch (dpi) and support for up to 16.7 million colors (24-bit color). The DeskScan II software included with the ScanJet IIc is capable of saving scanned images in several formats (including PICT, TIFF, Encapsulated Postscript, and MacPaint); these images may be edited using one of several graphics applications available for the Macintosh. The scanner is connected to the Macintosh through a SCSI port as part of a SCSI chain.

Customized Mobile Computer System Stand - All of the hardware described above is contained on a mobile unit. The stand was customized by Anthro Technology Furniture (Portland, Oregon) specifically for moving the system from the laboratory (where data is collected for research) to the classroom.

Additional software - Claris HyperCard is used to drive and control the laserdisc player in many situations (with stacks from the Voyager Company, see Figure 1). For example, several of the laserdiscs come with HyperCard "stacks" (i.e., programs) which provide information about artists, periods, and styles (see Figures 2 and 3). These stacks allow the user to browse through the art works on a given disc. In addition, some stacks will allow the user to select art works to be played as a contiguous slide show (see Figure 4). Other HyperCard stacks describe the perceptual aspects of sound (see Figures 5 and 6) as well as critical analyses of musical works. In addition, custom HyperCard stacks have been developed to collect data for research on experimental aesthetics. Finally, Apple Quicktime is used to show digital movies on the Macintosh.

Video Laserdiscs and Audio Compact Discs - Four laserdiscs containing several thousand images from collections of the Louvre, Musée d'Orsay, the National Gallery of Art, and the Metropolitan Museum of Art provide a vast array of art works spanning several periods and styles. In addition, a collection of classical music is available on compact disc.

Figure 1. The Voyager VideoStack provide a method for controlling a laserdisc player from the Macintosh.

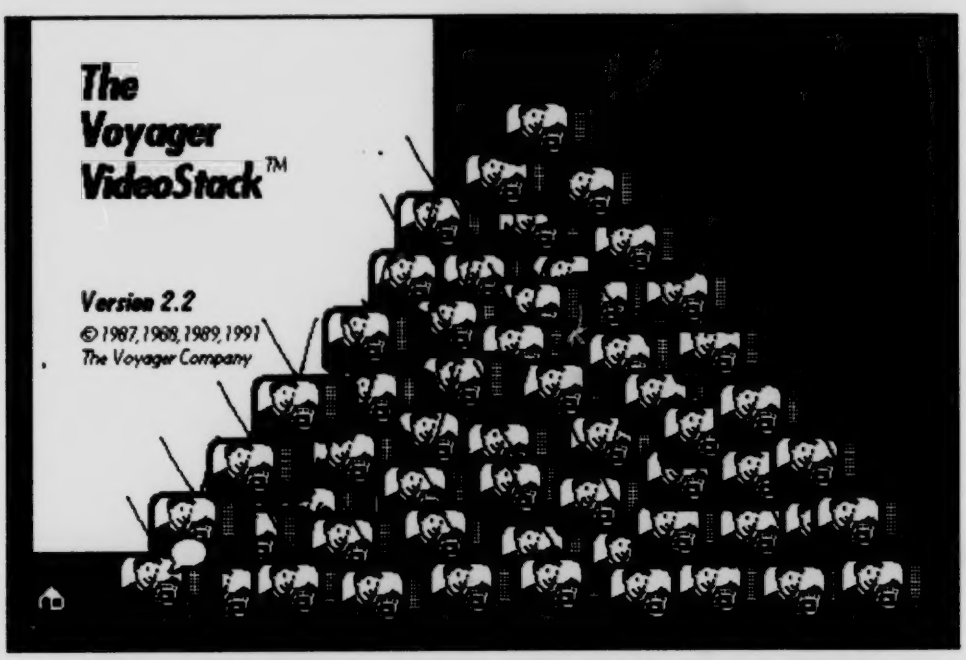
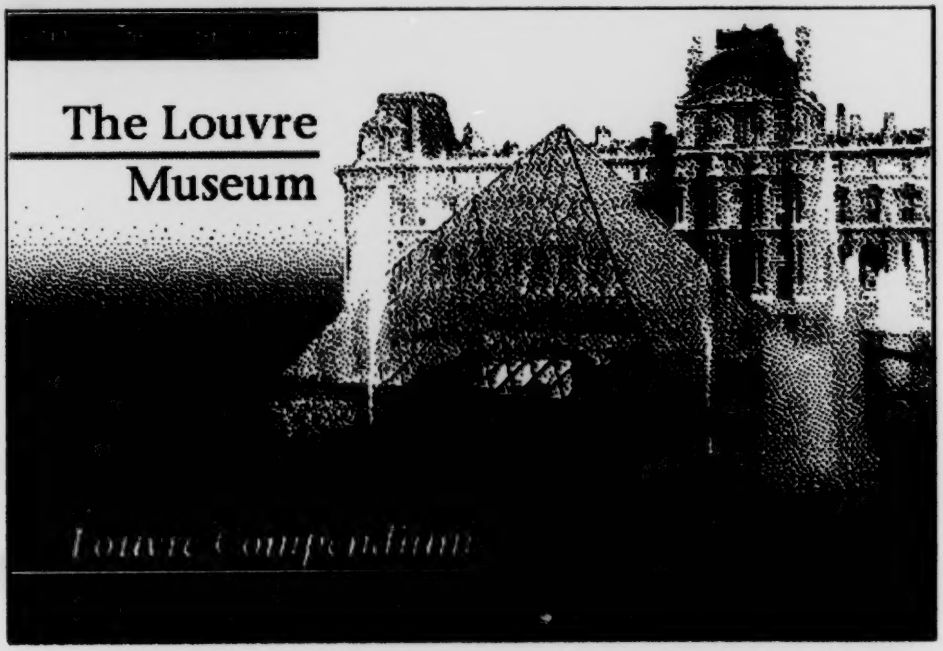


Figure 2. Opening screen from the Louvre Compendium HyperCard stack.



BEST COPY AVAILABLE

Figure 3. Opening screen from the National Gallery of Art HyperCard stack.

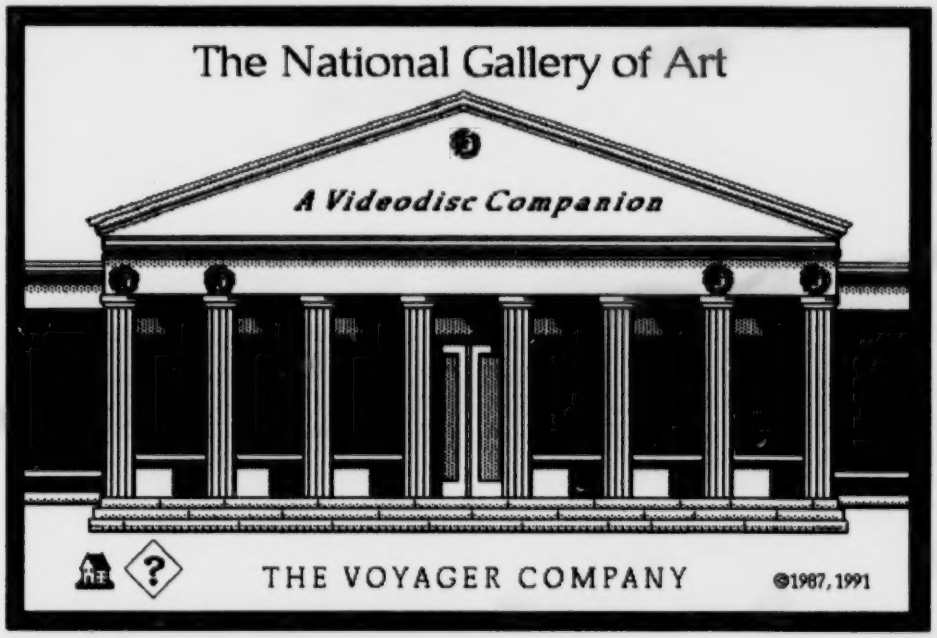


Figure 4. Some HyperCard stacks, like this one from the National Gallery of Art, allow the to list art works to be displayed as a slide show on an external video monitor.

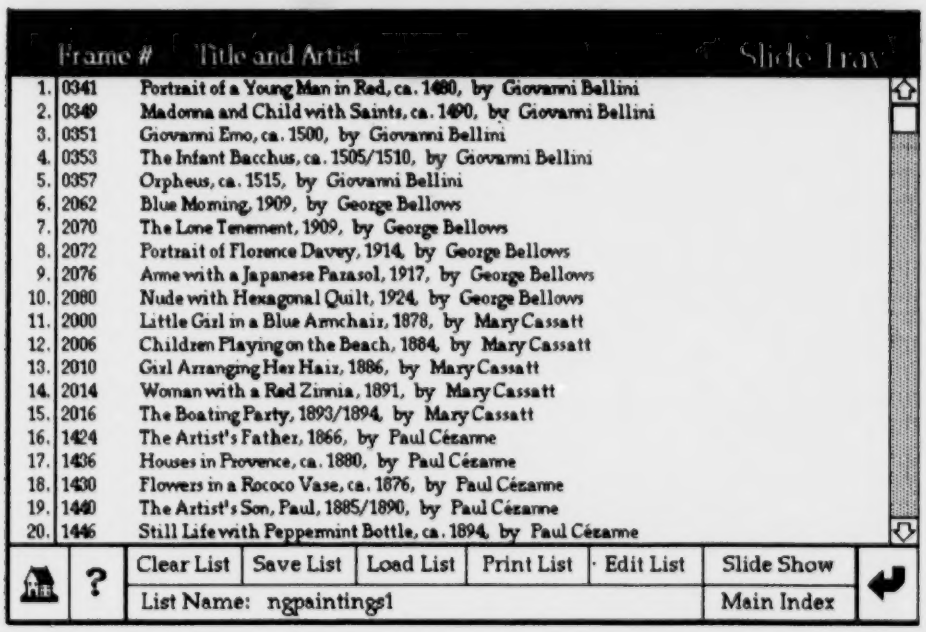

Frame # Title and Artist Slide Tray
1. 0341 Portrait of a Young Man in Red, ca. 1480, by Giovanni Bellini
2. 0349 Madonna and Child with Saints, ca. 1490, by Giovanni Bellini
3. 0351 Giovanni Emo, ca. 1500, by Giovanni Bellini
4. 0353 The Infant Bacchus, ca. 1505/1510, by Giovanni Bellini
5. 0357 Orpheus, ca. 1515, by Giovanni Bellini
6. 2062 Blue Morning, 1909, by George Bellows
7. 2070 The Lone Tenement, 1909, by George Bellows
8. 2072 Portrait of Florence Davey, 1914, by George Bellows
9. 2076 Anne with a Japanese Parasol, 1917, by George Bellows
10. 2080 Nude with Hexagonal Quilt, 1924, by George Bellows
11. 2000 Little Girl in a Blue Armchair, 1878, by Mary Cassatt
12. 2006 Children Playing on the Beach, 1884, by Mary Cassatt
13. 2010 Girl Arranging Her Hair, 1886, by Mary Cassatt
14. 2014 Woman with a Red Zinnia, 1891, by Mary Cassatt
15. 2016 The Boating Party, 1893/1894, by Mary Cassatt
16. 1424 The Artist's Father, 1866, by Paul Cézanne
17. 1436 Houses in Provence, ca. 1880, by Paul Cézanne
18. 1430 Flowers in a Rococo Vase, ca. 1876, by Paul Cézanne
19. 1440 The Artist's Son, Paul, 1885/1890, by Paul Cézanne
20. 1446 Still Life with Peppermint Bottle, ca. 1894, by Paul Cézanne
Clear List
Save List
Load List
Print List
Edit List
Slide Show
List Name: ngpaintings1
Main Index

Figure 5. The HyperAcoustics HyperCard stack describes the basics of sound forms.

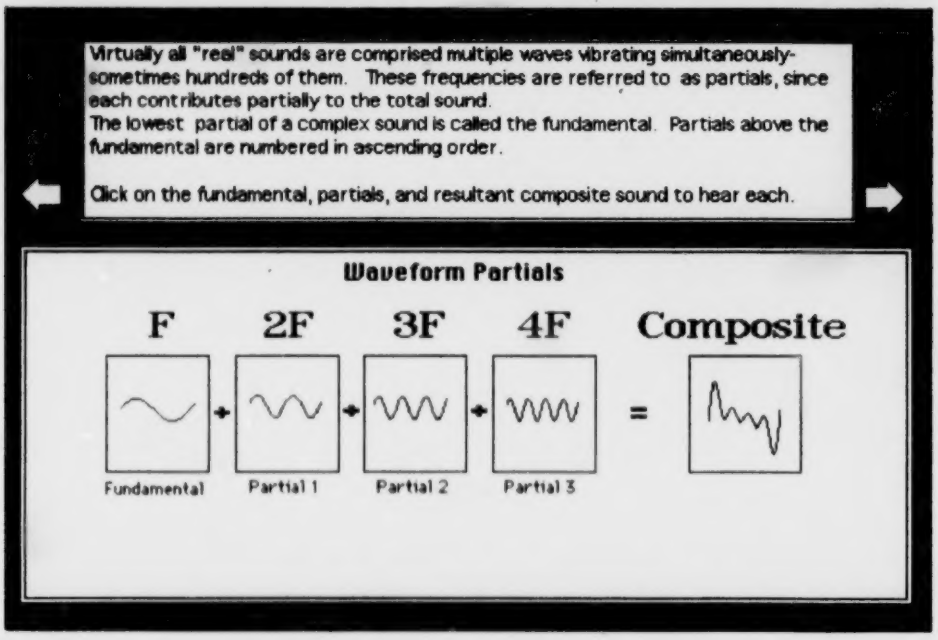
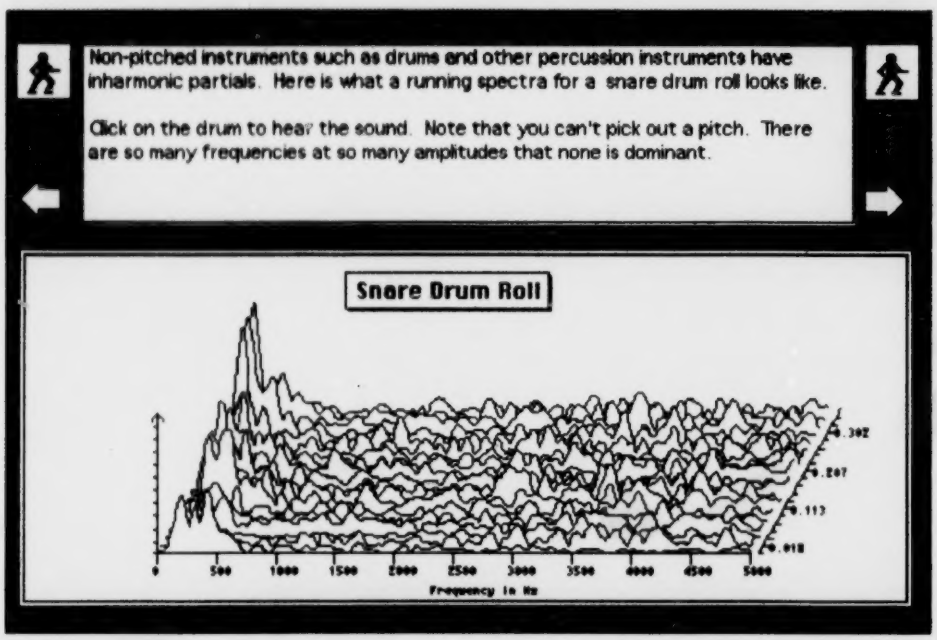

Virtually all "real" sounds are comprised multiple waves vibrating simultaneously-sometimes hundreds of them. These frequencies are referred to as partials, since each contributes partially to the total sound.
The lowest partial of a complex sound is called the fundamental. Partials above the fundamental are numbered in ascending order.
Click on the fundamental, partials, and resultant composite sound to hear each.
Waveform Partials
F
2F
3F
4F
Composite
=
Fundamental
Partial 1
Partial 2
Partial 3

Figure 6. The HyperAcoustics HyperCard stack offers analyses of complex sound forms.


Non-pitched instruments such as drums and other percussion instruments have inharmonic partials. Here is what a running spectra for a snare drum roll looks like.
Click on the drum to hear the sound. Note that you can't pick out a pitch. There are so many frequencies at so many amplitudes that none is dominant.
Snare Drum Roll
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
Frequency in Hz

CONSTRUCT VALIDITY AND THE NAIVE STUDENT

Patricia L. Ditunno
Philadelphia College of Pharmacy and Science
600 South 43rd Street
Philadelphia, PA 19104

Abstract

Basic concepts of construct validity (convergent and discriminant) are demonstrated to introductory students through the use of a semester-long participatory data collection exercise. Early in the semester, students are introduced to basic data collection techniques, and during the weeks of teaching individual differences, students self administer four self-report questionnaires (two intelligence tests and two trait related personality questionnaires). Intercorrelations demonstrate convergent and discriminant construct validity.

Construct Validity and the Naive Student

Promoting a basic understanding of the concepts of reliability and validity to introductory students is a major challenge. Test reliability and test validity are exemplars of these general concepts which can be demonstrated. Test reliability concerns a test's consistency (internally within the measure, or over time); test validity concerns whether a test does, in fact, measure what it claims to measure. For a test to have an acceptable level of validation with reference to a specific use, three kinds of validity are commonly required: content, criterion, and construct. Content validity concerns the test's ability to measure a representative sample of the domain that it purports to measure. Criterion validity concerns the test's effectiveness in predicting either a concurrent or future criterion (predictive). Construct validity, the most abstract of the three kinds of validation, requires that the test demonstrate the specific theoretical construct it purports to measure and is by far the most abstract and difficult for students to understand.

College freshmen or sophomores are considered by some to be in a transitional phase of cognitive development (Allen, Walker, Schroeder, & Johnson, 1987). They function somewhere between Piaget's concrete and formal levels, and they commonly attempt to circumvent effortful abstract reasoning by relying on memorization skills. The semester-long project described herein requires students to participate directly in data collection and analysis.

This activity allows students to practice combining information from personal experience with information from text and lectures and to practice statistical methods of measuring relationships and interactions among variables. Because the data matrix consists of personal data, students have a vested interest in the results.

Method

Subjects

Subjects were 100 college students, age 18-25, in four sections of the introductory psychology course.

Materials

The Menza "How Smart Are You?" (Salnay, 1988) and the Analogies Test (Grosswirth & Salny, 1981) were administered as short-form intelligence tests. The Locus of Control Scale (Rottter, 1971) and the Need for Uniqueness Scale (Snyder & Fromkin, 1980) were administered as short-form personality questionnaires.

Procedure

At the beginning of each semester, during the initial introduction to research methods and design, students are given an anonymous code number, which is entered on a standard data collection matrix form. Students are instructed on how to enter personal demographic data (sex, age, weight, height, semester standing, etc.) With this information, basic concepts of scaling (nominal and ordinal), measures of central tendency and correlation can be demonstrated. Other kinds of data may be added as the semester proceeds, thus maintaining ongoing interest and

participation.

At two-thirds through the semester, when individual differences are introduced, various methods for evaluating individual differences are covered, including methods of self-report. Students are introduced to testing concepts (standardization, reliability, and validity) and intelligence testing provides a concrete model. At this time students complete two different kinds of short intelligence tests: the Menza "How Smart Are You?" (Salany, 1988) and the Analogies Test (Grosswirth and Salany, 1981). They anonymously score and record their data on the data matrix. A primary level of validity may at this time be discussed: content validity (do these tests measure intelligence as a general factor, do they measure a part of multiple factors?), criterion validity (do these tests predict some concurrent or future performance?), and construct validity (do these tests measure a theoretical construct?). A correlation (Pearson r) is computed to demonstrate convergent validation.

I usually introduce personality and personality testing soon after individual differences. Diverse schools of personality are presented along with appropriate assessment strategies. When trait theories are presented, the concept of multidimensional factor analysis is discussed, and students complete two short personality questionnaires: The Locus of Control Scale (Rotter, 1971) and the Need For Uniqueness Scale (Snyder & Fromkin, 1980). As before, students anonymously score, and record their data on the data matrix. The concept of convergent validation is reviewed, and the concept of discriminant validation is introduced. Correlations

(Pearson r) between the two personality questionnaires are computed as are correlations between all possible pairs of intelligence and personality tests. Construct validation based on the dual approach of convergent and discriminant validation (Campbell and Fiske, 1959) is demonstrated.

Results

Table 1 shows the correlation coefficients (Pearson r) between all tests and questionnaires administered. Significant correlations are reported for each section between pairs of intelligence tests and pairs of personality questionnaires ($p < .05$), and no significant correlations across the two independent constructs (see Appendix).

Discussion

Significant correlations are found between two different measures of intelligence and two different measures of personality; and these measures do not correlate with variables from which they should theoretically differ, in no case does an intelligence test significantly correlate with a personality questionnaire. Therefore this demonstration fulfills the requirements of convergent and discriminant construct validation.

Both tests of intelligence correlate to the extent that they may have some common factor. The Menza test has verbal and math components; the Analogies test has primarily verbal relations factors. Therefore each also taps "specific" factors that are not

necessarily overlapping. Neither significantly correlates with either of the personality tests, as expected.

Both personality tests seem to have some correlational trait relationship, such that the need for uniqueness may be a subset of an internal locus of control. The individual who perceives himself or herself as primarily responsible for exerting control over his or her environment, who perceives himself or herself as the active causative factor in determining his or her life experiences, who is motivated internally, and does not necessarily conform is therefore exhibiting a need to be different. He or she would be motivated by a "need for uniqueness". There are no significant correlations between the personality tests and either intelligence tests, as expected.

Validity as an abstract concept is difficult for introductory students to understand. Students must be able to discriminate among three forms of validity (content, criterion, and construct) and to understand how each is demonstrated. This exercise helps students understand construct validity by requiring them to take part in collecting, analyzing, and interpreting personal data. Use of personal data increases students' interest, and active participation facilitates their understanding.

REFERENCES

Allen, J. L., Walker, L. D., Schroeder, D. A., & Johnson, D. E.(1987). Attributions and attribution-behavior relations: The effect of level of cognitive development. Journal of Personality and Social Psychology, 52, 1099-1109.

Campbell, D. T. & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. Psychological Bulletin, 56, 81-105.

Grosswirth, M. & Salny, A. (1981). The Mensa genius quiz book. Reading, Mass: Addison-Wesley.

Rotter, J. (1971). Locus of Control Scale. Psychology Today, 42.

Salny, A. (1988). The Mensa book of words, word games, puzzles and oddities. New York: Harper & Row.

Snyder, C. R., & Fromkin, H. L. (1980). Uniqueness: The human pursuit of difference. New York: Plenum.

APPENDIX

Table 1. Construct validation correlations (Number in Group in Parentheses)

		IQ		Pers
		A	B	A
Fall'91/ section 1				
IQ	A			
	B	.59*(20)		
Pers	A	-.15(20)	-.11(20)	
	B	-.27(20)	-.21(20)	.50*(20)
Fall'91/ section 2				
IQ	A			
	B	.50*(25)		
Pers	A	.20(18)	.28(20)	
	B	-.19(18)	.17(18)	.44*(20)
Spring'92/ section 1				
IQ	A			
	B	.45*(22)		
Pers	A	.21(21)	-.18(21)	
	B	.05(20)	.23(22)	.46*(28)
Spring'92/ section 2				
IQ	A			
	B	.47*(21)		
Pers	A	.20(23)	.21(21)	
	B	-.25(23)	.25(21)	.50*(25)

Note. *p<.05.

Note

Requests for reprints should be sent to Patricia L. Ditunno, Philadelphia College of Pharmacy and Science, 600 South 43d Street, Philadelphia, PA 19104.

Requiring Students To Think of Examples Can Increase Their Involvement

Gabriele B. Sweidel
Kutztown University
Kutztown, PA

In an effort to help students understand and remember the information from an introductory psychology class, open to both majors and non majors, requirements also included journal writing and a final paper incorporating the journal entries.

The Journal Writing Project

Students were responsible for keeping a journal of anecdotal experiences related to the readings. Two examples (different topics) from their own life, someone else's, or from something they read were used to illustrate each chapter's content. Students were strongly encouraged to write their examples as soon as the chapter was completed in class, although journals were collected for review only every two weeks. Student examples indicated a seriousness of attitude toward the course and assignment not always evident from test scores. For the chapter on sensation a student wrote, "I never thought much about it before, but when I read about the active process of perception, I thought of the many times when I sit in class staring right at the teacher, listening, but not comprehending a thing...Another example of this happens when I am studying for a test. I read the sentence six times, but still do not understand it. I try but my thoughts are a million miles away, yet it is different from a day dream."

The Paper

Students were to take their examples and concentrate on a few exemplary ones to illustrate one or more concepts learned during the semester. For the paper they needed to synthesize the information and present it in expository form. This exercise was particularly beneficial for

non psychology majors as it allowed them to focus on material germane to their interests. For example, one art major concentrated on perspective, as it relates to perception, for her paper. "As an art student, learning to portray perspective upon canvas is to study how the human eye sees distance...Man visualizes space by monocular cues. In turn, the artist takes these cues and uses them to render perspective upon his [sic] format." A student commented in his paper, "...after writing this paper I've come to see that every aspect of my life has dealt with some form of psychology. I can now see why it is of interest to so many people to understand human processes and behavior."

Enabling students to integrate what may initially appear as "irrelevant" information has many benefits including, 1) students must *read and understand* the material to complete the assignment; 2) providing a forum for the shy student to indicate his/her understanding of the material; 3) providing professor feedback to journal entries as an ongoing process to help students gauge their development in the course; 4) personalizing the material to enhance memory; and 5) providing an alternate evaluation opportunity. An end-of-semester Likert-type survey indicated that 87% (35) of the students felt the project increased their understanding and 92% (37) enjoyed the project and would recommend using it agian.

I also realized unexpected benefits. I was getting to know my students in a way the classroom experience often obscures. Students, whom a teacher may rarely get to know due to reluctant or nonexistant class participation, revealed insightful thinking in their journals; an aspect of themselves otherwise unknown. Additionmally, it provided easier

identification of students who are having difficulty with the material. Class attendance and effort were also found to be exceptionally high.

Acquisition of Applied Skills via Active Learning

Holiday E. Adair, Ph.D.

Wilkes University
Wilkes-Barre, PA 18766

Acquisition of Applied Skills via Active Learning

Various courses in every psychology department are oriented to the acquisition of applied skills in addition to understanding theory. Examples of these classes include: Statistics in Psychology, Experimental Psychology, Psychological Tests, Abnormal Psychology and Clinical Psychology. Becoming proficient in skills is especially important for those students who plan to enter the workplace after graduation with a baccalaureate and have no plan to pursue graduate school. They need to have marketable skills that can be honed on-the-job and cannot rely on the years of practice that graduate school provides through practica.

In developing psychology courses to meet the diverse needs of students who will enter the workplace after college as well as those who will pursue graduate school, the professor needs to: 1) present theory that is integrated with applied skills so that a cohesive picture of the material is learned; 2) identify those skills that are teachable to the level of proficiency for an entry-level job in psychology; 3) provide practice in class to acquire these skills, and; 4) create methods of feedback and evaluation to assist the student in improving their knowledge and skills.

Many students find social service entry-level positions after graduation. Several courses are especially useful to such students. For example, it is helpful to have applied skills as well as theoretical knowledge in Abnormal Psychology. Students can acquire knowledge about the current diagnostic system (DSM-III-R) through lecture, text and video.

They may acquire skills in interviewing by being a part of an Intake Team wherein they each take turns generating questions for a patient from a psychologist's, a psychiatrist's and a

social worker's perspective. Individuals role-playing patients (based on actual cases) come to class and are interviewed by the intake teams (each member of the triad has an opportunity to interview a patient as three patients are scheduled for the semester). The interviews are taped and interviewers are given informal feedback by the classroom.

Students acquire writing skills by preparing a "diagnostic report" on each patient. Peer feedback sessions are scheduled for the week after the interview when the first draft of the report is due.

Also, students can acquire research skills in writing a focused research paper. This assignment gives students an opportunity to synthesize material learned in class with outside readings on a topic of special interest. This paper is also reviewed in peer sessions as well as by the instructor. It is successively built upon through the semester by having portions of the paper assigned to be worked on during the term.

As with the example above, participant of the roundtable discussion will bring their ideas and concerns to peers. Participants will identify issues in teaching a skills acquisition course at the undergraduate level such as participation policy, group assignment, focus of tasks, grading schemes, sensitivity to diverse learning styles, and methods of integrating theoretical material. Participants will also share what has worked for them in their classrooms and what hasn't and provide suggestions and feedback to each other on active learning of skills for entry-level positions in psychology. It is hoped that a diverse representation of subfields in psychology will attend so that participants can take ideas back to their colleagues.

Three Laboratory Exercises in Cognitive Psychology

Anita M. Meehan

Kutztown University

Abstract

This presentation provides complete details and handouts for three laboratory exercises relating to memory and cognition. The topics addressed are: (1) metamemory and the "feeling-of-knowing," (2) prototypes and category formation, and (3) the availability heuristic. Students participate as subjects and compare their findings to the original studies.

Three Laboratory Exercises in Cognitive Psychology

One way to actively involve students in class is to have them participate in experiments. In my Cognitive Processes course, I use laboratory simulations almost as much as I lecture. Through actually participating in a study, students have a better understanding of the methodology and results of the original experiment. These labs also provide them with opportunities to perform statistical analyses on data and variables that they are familiar with. They practice interpreting data and compare class findings to the original studies.

Details and handouts for three exercises are provided here. One lab is a modified replication of Hart's (1965) study of metamemory and the "feeling-of-knowing." Using a test of general information I revised from Zechmeister and Nyberg (1982), students determine whether their "feeling-of-knowing" is fairly accurate. Another exercise relates to Eleanor Rosch's (1973) view that categories are organized on the basis of prototypes. Students participate in a sentence verification task and reaction times to sentences containing prototypes vs. nonprototypes are compared. The third lab is a demonstration of the availability heuristic using a modification of Tversky and Kahneman's (1973) classic research . The labs take anywhere from 10-40 minutes. The prototype lab requires at least one reaction timer, but this

is a common piece of equipment in psychology departments.

Students look forward to the labs as they break up lecture. The lab worksheets students turn in are also a welcome change from tests (for both students and professor alike). Although I use these labs in a cognitive course, they could easily be used in other courses such as research methods.

References

Hart, J. T. (1965). Memory and the feeling-of-knowing experience. Journal of Educational Psychology, 56, 208-216.

Rosch, E. H. (1973). Natural categories. Cognitive Psychology, 4, 328-350.

Tversky, A. & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. Cognitive Psychology, 5, 207-232.

Zechmeister, E. B. & Nyberg, S. E. (1982). Human memory: An introduction to research and theory. Monterey, CA: Brooks/Cole.

Instructions for "Feeling-of-Knowing" Lab

In this lab subjects take the same test of general information first as a recall test and later as a recognition test. The purpose is to determine whether a "feeling-of-knowing" is reliable information about what is stored in memory.

Tell Subjects:

I am going to ask you a series of general information questions. The questions cover a variety of topics - history, sports, literature, geography - like on Jeopardy. First I want you to take out a sheet of paper and number it from 1 to 40. (Wait while they do this). Now I'm going to read the questions. If you know the answer or are pretty sure you know it then write it down. If you don't know the answer now but are confident you could recognize the correct answer on a multiple-choice test then write "Yes" next to that question number. If you don't know the answer now and are confident that you wouldn't even know it if you had a multiple-choice test then write "No" next to that question number. In other words, you either write down the answer, write down "Yes" you could pick out the correct answer from a set of choices, or "No" you probably couldn't even pick the correct answer if you had a set of choices. Do you understand the directions?

Read each question allowing about 15 seconds per item. When finished give subjects the recognition test version. Later have subjects score their own papers as you read them the answer key. Distribute the lab question sheet. Do a paired t-test to compare the proportion of correct answers to the "Yes" items vs. the "No" items.

Test of General Information

1. What is the minimum age allowed by law for a U.S. president?
   a. 25 b. 40 c. 30 d. 35

2. What movie actress played the lead role in the movie "Driving Miss Daisy?"
   a. Meryl Streep c. Jessica Tandy
   b. Shirley MacLaine d. Bea Arthur

3. What is the capital city of Peru?
   a. Lima b. Calico c. Bogota d. Trujillo

4. What is the chemical symbol for iron?
   a. Tb b. I c. Fe d. Ir

5. With what singer is the song "Born in the U.S.A." usually associated?
   a. Bruce Springsteen c. Billy Joel
   b. Rick Springfield d. Prince

6. What is the name of the longest river in the world?
   a. Amazon b. Mississippi c. Nile d. Yangtze

7. In the Bible, who had the coat of many colors?
   a. Jacob b. Joseph c. Abraham d. Peter

8. How many ounces are there in a pint?
   a. 16 b. 20 c. 10 d. 13

9. In what novel is the character Captain Ahab found?
   a. Mutiny on the Bounty c. Lord Jim
   b. Two Years Before the Mast d. Moby Dick

10. How many planets are there in our solar system?
    a. 10 b. 12 c. 9 d. 7

11. Who said, "We have nothing to fear but fear itself."
    a. Winston Churchill c. Margaret Thatcher
    b. Franklin Roosevelt d. John F. Kennedy

12. Abraham Lincoln, George Washinston, Thomas Jefferson, and what other president are sculptured into Mount Rushmore?
    a. Theodore Roosevelt c. Ulysses S. Grant
    b. Andrew Jackson d. John Adams

13. Who was the first man to step on the moon?
    a. Edwin Aldrin c. Frank Borman
    b. Neil Armstrong d. Alan Shephard

14. In what year was the Emancipation Proclamation issued?
    a. 1860 b. 1863 c. 1865 d. 1871

15. Where was the last battle that ended the American Revolution fought?
    a. Saratoga b. Bunker Hill c. Richmond d. Yorktown

16. Who is considered to be the inventor of the radio?
    a. Thomas Edison c. Enrico Fermi
    b. Guglielmo Marconi d. George Westinghouse

17. In what Shakespearean play was the following said, "Something is rotten in the state of Denmark"?
    a. Macbeth b. King Lear c. Hamlet d. Othello

18. Who was the last horse to win racing's triple crown?
    a. Secretariat c. Citation
    b. Seattle Slew d. Affirmed

19. What U.S. state is called the "Lone Star State"?
    a. Texas b. California c. Maine d. Vermont

20. Who made the first nonstop flight across the Atlantic Ocean?
    a. Charles Lindbergh c. Amelia Earhart
    b. Eddie Rickenbacher d. Francis Gary Powers

21. How many centimeters are there in an inch (to the nearest hundredth)?
    a. 2.54 b. 2.22 c. 2.47 d. 2.63

22. Who wrote "The Interpretation of Dreams"?
    a. James b. Janet c. Mesmer d. Freud

23. Who wrote "The Origin of Species"?
    a. Freud b. Mendel c. Bacon d. Darwin

24. Who painted the Sistine Chapel?
    a. Rembrandt b. Michaelangelo c. daVinci d.Raphael

25. What baseball team did Roger Maris play for?
    a. LA Dodgers c. NY Yankees
    b. St. Louis Cardinals d. Oakland A's

26. Who founded the Standard Oil Company?
    a. E. Harriman c. C. Vanderbilt
    b. J.P. Morgan d. J.D. Rockefeller

27. Who painted the picture "An American Gothic?"
    a. Andrew Wyeth c. Whistler's mother
    b. Gilbert Stuart d. Grant Wood

28. What is the highest mountain peak in the U.S.?
    a. Mt. St. Helen's c. Pike's Peak
    b. Mt. McKinley d. Mt. Olympia

29. How many feet are there in a mile?
    a. 6710 b. 5280 c. 2163 d. 3744

30. What city is the capital of Canada?
    a. Ottawa b. Quebec c. Montreal d. Toronto

31. Who was known as "Old Hickory?"
    a. Zachary Taylor c. Andrew Jackson
    b. John Jacob Astor d. Teddy Roosevelt

32. Who wrote "Paradise Lost"?
    a. Milton b. Byron c. Johnson d. Pope

33. What professional football team was the winner of the first Super Bowl?
    a. Kansas City Chiefs c. New York Jets
    b. Green Bay Packers d. Baltimore Colts

34. In the comic strip "Peanuts" who is Lucy in love with?
    a. Linus b. Schroeder c. Franklin d. Charlie Brown

35. What is the best known work of Cervantes?
    a. Les Miserables c. El Cid
    b. Troilus and Cressida d. Don Quixote

36. On what river is the Hoover Dam?
    a. Missouri c. Mississippi
    b. Rio Grande d. Colorado

37. Who first sailed around the world?
    a. Magellan b. Balboa c. Ponce de Leon d. Cook

38. Who did Paul McCartney marry? (first name)
    a. Linda b. Yoko c. Mary d. Bianca

39. What was the last name of Lucy's neighbors on the television show "I Love Lucy"?
    a. Ricardo b. Gillis c. Mertz d. Harmon

40. What sea does Syria border?
    a. Baltic b. Arabian c. Mediterranean d. Red

Test of General Information
Answer Key

1. d
2. c
3. a
4. c
5. a
6. c
7. b
8. a
9. d
10. c
11. b
12. a
13. b
14. b
15. d
16. b
17. c
18. d
19. a
20. a
21. a
22. d
23. d
24. b
25. c
26. d
27. d
28. b
29. b
30. a
31. c
32. a
33. b
34. b
35. d
36. d
37. a
38. a
39. c
40. c

Name _____ Date _____

Lab: Metamemory and the "Feeling of Knowing"

1. Explain what is meant by metamemory.

2. What is the purpose of this experiment?

3. Find the following scores based on your performance on the recognition test.

	"Yes" items	"No" items
no. correct	_____	_____
no. incorrect	_____	_____
total	_____	_____

4. Find the proportion correct on the "Yes" vs. "No" items.

"Yes" _____ "No" _____

5. What do your results seem to indicate about your "feeling of knowing"?

6. What did Hart's (1965) original study find out about people's "feeling of knowing"? See text.

	Condition	
Subj.	A (Yes Items)	B (No Items)
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____
11	_____	_____
12	_____	_____
13	_____	_____
14	_____	_____
15	_____	_____
16	_____	_____
17	_____	_____
18	_____	_____
19	_____	_____
20	_____	_____
	$\bar{X}$ = _____	$\bar{X}$ = _____
	s = _____	s = _____

Calc. value of statistic = _____; Critical value = _____

Instructions for Prototype Lab

I WILL READ YOU A NUMBER OF SENTENCES. YOU ARE TO TELL ME WHETHER THE STATEMENT IS TRUE OR FALSE. DO NOT RESPOND UNTIL THE ENTIRE SENTENCE HAS BEEN READ.

(Note that this lab requires a reaction timer of some sort. Begin timing after the sentence has been read. Reaction time data can be analyzed with a paired t-test).

1. A dresser is an example of furniture.
2. A dress is an example of clothing.
3. A bed is an example of clothing.
4. A raft is a vehicle.
5. A peach is a fruit.
6. A honeydew is a fruit.
7. String beans are a vegetable.
8. A stove is an example of furniture.
9. A sword is a weapon.
10. A table is an example of furniture.
11. A tie is an example of clothing.
12. A rocket is a weapon.
13. Lettuce is a fruit.
14. A skirt is an example of clothing.
15. A sled is a vehicle.
16. An apple is a vegetable.
17. Spinach is a vegetable.
18. Fists are a weapon.
19. An elevator is an example of furniture.
20. A radio is an example of furniture.
21. An onion is a vegetable.
22. A bus is a vehicle.
23. A knife is a vehicle.
24. A banana is a fruit.
25. A bomb is a weapon.
26. A watermelon is a fruit.
27. Mittens are an example of clothing.
28. An eggplant is a vegetable.
29. A motorcycle is a vehicle.
30. Socks are a weapon.

* Sentences based on Rosch and Mervis (1975). See table in Reed text.

Name _____

Lab: Prototypes

1. Reaction times

1. _____	11. _____	21. _____
2. _____	12. _____	22. _____
3. _____	13. _____	23. _____
4. _____	14. _____	24. _____
5. _____	15. _____	25. _____
6. _____	16. _____	26. _____
7. _____	17. _____	27. _____
8. _____	18. _____	28. _____
9. _____	19. _____	29. _____
10. _____	20. _____	30. _____

2. Find your average reaction time for prototypes vs. nonprototypes. Each were represented in 12 sentences:

   Prototypes (1, 2, 5, 7, 9, 10, 14, 17, 22, 24, 25, 29)
   Nonproto (4, 6, 8, 11, 12, 15, 18, 20, 21, 26, 27, 28)

   Prototypes Mean = _____

   Nonprototypes Mean = _____

3. Based on prior research (e.g., Rosch), what was the hypothesis about reaction time to the sentences?

4. Do your results support this hypothesis?

5. Briefly describe the difference between the exemplar approach and the prototype view of categorization.

	Condition	
Subj.	A (Prototypes)	B (Nonprototypes)
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____
11	_____	_____
12	_____	_____
13	_____	_____
14	_____	_____
15	_____	_____
16	_____	_____
17	_____	_____
18	_____	_____
19	_____	_____
20	_____	_____
	$\bar{X}$ = _____	$\bar{X}$ = _____
	s = _____	s = _____

Calc. value of statistic = _____; Critical value = _____

Lab: Availability Heuristic

Instructions to subjects:

In this experiment I am going to read you a long list of names of movie and television personalities. When I am finished I will test your memory for what you just heard.

Read the list in the order below. Use only one list per subject. Wait 30 seconds after the last name and then ask students a) whether there were more male or female names in the list and b) how many male names and how many female names they think were in the list (use a t-test to analyze this).

Females More Famous
(17 F vs. 18 M)

1. Fred Gwynne
2. Marilyn Monroe
3. Jon Voight
4. Peter Scolari
5. Katherine Hepburn
6. LeVar Burton
7. Oprah Winfrey
8. Elizabeth Taylor
9. Burgess Meredith
10. Meryl Streep
11. Alan Arkin
12. Bette Davis
13. Tony Dow
14. Brooke Shields
15. Jay North
16. Jane Fonda
17. Alec Guiness
18. Paul Reiser
19. Barbra Streisand
20. Broderick Crawford
21. Sally Fields
22. Ernest Borgnine
23. Liza Minelli
24. Robert Young
25. Charles Durning
26. Shirley Maclaine
27. Chuck Connors
28. Diana Ross
29. Morgan Freeman
30. Joan Rivers
31. Van Johnson
32. Diane Keaton
33. Carol Burnett
34. Clayton Moore
35. Roseanne Arnold

Males More Famous
(17 M vs. 18F)

1. Anne Bancroft
2. Tom Hanks
3. June Allyson
4. Denise Nicholls
5. Paul Newman
6. Lana Turner
7. Eddie Murphy
8. Clark Gable
9. Emma Thompson
10. Bill Cosby
11. Loretta Young
12. Dustin Hoffman
13. Patricia Richardson
14. Humphrey Bogart
15. Cindy Williams
16. John Wayne
17. Karen Allen
18. Eve Arden
19. Jack Nicholson
20. Stella Stevens
21. Marlon Brando
22. Vivian Leigh
23. Robert Redford
24. Carole Lombard
25. Brigitte Nelson
26. Tom Cruise
27. Elizabeth Montgomery
28. Jimmy Stewart
29. Diahann Carroll
30. Woody Allen
31. Jean Stapleton
32. Burt Reynolds
33. Harrison Ford
34. Rita Moreno
35. Rock Hudson

Name _____

Date _____

Availability Heuristic Lab

1. Were there more women's names on the list or more men's names? (check one)

   more women _____

   more men _____

2. How many women's names do you think were on the list?

   _____

3. How many men's names do you think were on the list?

   _____

4. Explain how the availability heuristic relates to this lab. What was expected to happen and why?

5. Do your data support the hypothesis? Explain.

6. How does the availability heuristic contribute to the formation and maintenance of illusory correlations?

	Condition	
	A	B
Subj.	(Male Names)	(Female Names)
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____
11	_____	_____
12	_____	_____
13	_____	_____
14	_____	_____
15	_____	_____
16	_____	_____
17	_____	_____
18	_____	_____
19	_____	_____
20	_____	_____
	$\bar{X}$ = _____	$\bar{X}$ = _____
	s = _____	s = _____

Calc. value of statistic = _____; Critical value = _____

Privacy Issues in Assignments

Susan C. Cloninger

Russell Sage College

Presented at the conference *Teaching of Psychology: Ideas & Innovations*. (Ellenville, NY; March 17, 1994).

Correspondence should be addressed to: Susan C. Cloninger, Associate Professor, Department of Psychology, Russell Sage College, Troy, NY 12180. (Internet: CLONIN@uacsc1.albany.edu; Bitnet: CLONIN@albnyvms)

Privacy Issues in Assignments

Susan C. Cloninger, Russell Sage College

Personal journals are assigned in college courses and earlier for a variety of reasons, including enhancing self-development and increasing writing fluency. At least two pedagogical traditions have used journals for personal growth: the humanistic perspective and feminist pedagogy. The humanistic education perspective, building particularly on the writings of Carl Rogers (1969, 1974), accepts the premise that learning should encompass personal growth as well as academic knowledge (Cangemi, 1984; Roscoe & Peterson, 1982). This process is enhanced when both teacher and learner are genuine and bring more of their human characteristics to the learning experience, and when the teacher empathically understands and genuinely accepts the student as a person. A frequent component of humanistic education, experiential learning exercises provide opportunities for students to reflect upon their own experience (Bell & Schniedewind, 1989; Thomas, 1988). One such experiential learning assignment can be a personal journal.

Feminist pedagogy shares with humanistic pedagogy an experiential focus and a recognition that the interpersonal relationship or connectedness between student and teacher is important to the learning process. Feminist teachers also often assign personal journals, and this assignment frequently elicits the disclosure of private feelings and experiences (Berry & Black, 1987; Hesford, 1990; Ritchie, 1990; Walden, 1988).

The personal journal is more structured than a diary. Several writers have suggested structured types of entries for such a journal (Adams, 1990; Berry & Black, 1987; Rainer, 1978). Research by James Pennebaker and his colleagues indicates that writing about personal feelings has measurable positive effects on the physical health of college students (Pennebaker & Beall, 1986; Pennebaker, Colder, & Sharp, 1990; Pennebaker, Kiecolt-Glaser, & Glaser, 1988; cf. also Ware & Perry, 1987).

The Problem

When students disclose personal material in journals, particularly in a psychology class, ethical issues may arise. On the one hand, it is often important to students, as to diarists in literature (Rosenwald, 1987), that their stories be heard. One English teacher who assigned journals found that students "bordered on revealing to me events that I was legally required to report to authorities" (Heath, 1988, p. 58) and, like others who have used this technique (Jenkinson, 1989), questioned whether so much private material should be disclosed. Some students may suppose that personal disclosures to a psychologist will elicit personal counseling or therapeutic responses by the instructor. On the other hand, most teaching psychologists are not trained as counselors or therapists, and even when they are, the role of teacher may preclude accepting the role of counselor or therapist. Furthermore, the options available to a therapist are not all available to a classroom teacher. (Perhaps I am not the only one who has wished she could screen students before undertaking a professional commitment to them.)

For several years, I have taught a course that includes a personal journal as a major requirement. During this time, I have found the course gratifying and engaging. Yet it sometimes triggers strong feelings in me, as in my students. At times I have been troubled by the disclosures of my students in many ways: empathic concern for their well-being, anger at their abuse, fear for their stupidity, and so on. The issues I will discuss today focus on ethical issues raised by the journal assignment. In particular, what sorts of guidelines can we propose to guide faculty who will read sometimes intimate, sometimes horrifying details of their students' lives. How can a student's right to privacy be reconciled with the aim of fostering personal growth through writing journals? Is it unethical or unprofessional to invite students to write about personal, emotion-laden topics, such as their sex lives, their conflicts with family and friends, their future life goals? Other instructors who use journals have voiced similar concerns (e.g., Heath, 1988; Jenkinson, 1989; Singer, 1990).

A review of the literature abstracted by ERIC and PsychLit revealed less guidance than I had hoped. There are many articles available that describe the process and advantages of journal-writing from elementary school through college and graduate school (e.g., Anderson, 1993; Bowman, 1983; Connors, 1988; Heinze, 1987; Hedlund et al, 1989; Heinze, 1987; Hettich, 1990; Holland, 1989; Jolley & Mitchell, 1990; McManus, 1986; Stanley, 1989; Sullivan, 1989; Wershoven, 1991). The specific issue of student privacy, however, is considered primarily at the elementary and secondary level (e.g., Baker, 1987; Gluckman, 1987), where students are minors, protected by different ethics and laws than the more mature students whom we teach in college and university settings. However, elementary and secondary students are different from college students. They may be too young to be able to choose what private issues to disclose and which to keep confidential. Furthermore, they do not have elective courses to the extent that college students do. College students may avoid journals, so long as they are in courses that are not required, and are clearly announced in advance. Therefore, privacy of college student journals requires separate consideration, though it may profit from the experience of educators in secondary schools (Fulwiler, 1987).

The American Association of University Professors, it its Statement on Professional Ethics, mandates that professors "respect the confidential nature of the relationship between the professor and student" (1987, p. 49). More detail would be helpful in a personal growth course. The American Psychological Association, as you know, presents formal statements of ethics (American Psychological Association, 1982, 1990). These statements, however, are directed to psychologists in their roles as researchers and practitioners. Some discussions by therapists, such as considerations of breaking confidentiality in order to protect a client or someone else (e.g., Pietrofesa et al, 1990), may assist the rare and unfortunate faculty member who learns of potential danger through a journal assignment or otherwise. Since therapy by its very nature includes discussion of private material, though, that literature offers no guidance to teachers who may wish to limit the extent to which their assignments require or encourage students to disclose personal material.

I will suggest a list of guidelines for college and university teachers who assign personal journals. These will draw on my experience with such assignments, and observations of others in the journal literature. Some of these guidelines could be illustrated with anecdotal recollections that do not belong in a formal presentation. Before turning to the guidelines, though, I think it desirable to consider the journal assignment from the perspective of students. Perhaps their reactions will be informative. At any rate, since their reactions are in the form of data, with numbers and significance tests and scales and personality measures, they give at least the aura of scientific foundation to my suggestions, though I confess that the subjective element is greater than the objective.

Down to business, then. First, I will present survey data about issues of privacy and journal writing. Then, I will discuss the ethical guidelines. (I have distributed these in advance as a handout, so that you will have time to prepare your own comments, since I expect to take new thoughts away from this session.)

The Survey

These guidelines are based on my experience teaching a course, *The Self: Perspectives from Psychology, Sociology, and Psychoanalysis,* in which the primary written assignment is a personal journal. Class exercises include discussion of personal material with class members through structured exercises. (I should note that, by the time this data collection occurred, the class was reading few if any research papers, and leaned heavily toward Jungian analytical psychology, through the interpretation of myths and dreams.) The course is taken by junior and senior level undergraduates as an elective. Because it is a general education course, students come from a variety of majors; psychology majors are a small minority.

Subjects

From January 1991 through Spring 1992, six sections of the course were offered, and 141 students were enrolled for whom addresses could be obtained. These students were contacted in November, 1991, which was at least 6 months after the end of the course for all students. Addresses were obtained through the Alumnae [or Alumni, since a few students in the Evening Division were males] Office and the Registrar. The materials (described below) were sent by mail, to be returned anonymously in enclosed stamped self-addressed envelopes. A separate return post card was also enclosed, which identified them by name, in order to permit follow-up. 74 students returned questionnaires, and 70 returned the post cards. In addition, 5 envelopes were returned by the post office as undeliverable. Those who had not returned post cards were sent a second mailing. 14 additional questionnaires were obtained. (In a few cases, students noted that they had not received the original mailing, even though the mail had not been returned by the post office. Thus it is somewhat unclear how many students actually received the envelopes, and how many were lost in the mail or thrown away by new residents of the addresses which students occupy so transiently.) At any rate, the overall response rate was 62 per cent (88 of the 141 students whom I attempted to contact). If the 5 envelopes returned by the post office are excluded, the return rate climbs to 65 per cent. It should be noted that the response rate of approximately 50% is not unusual for mailed surveys.

Based on their responses to demographic questions included in the mailed survey, most of the students (62%) were seniors when they took the class. 34% were juniors, 2 (2%) were sophomores, and 1 (1%) was a graduate student. The majority (79%) majored in professional programs; 21% majored in liberal arts programs. This is consistent with the historic strengths of Russell Sage College in preparing women for careers in education, nursing, physical therapy, business, and other professional fields.

Almost all students were female, because Russell Sage College is a single-sex institution. A few men enroll through cross-registration. In order to protect the anonymity of these few male students, the questionnaires did not ask whether the respondent was male or female.

In order to analyze responses by student grade, the return envelopes sent to students were precoded to indicate whether the student had received a grade of A or a lower grade (mostly B, with a few lower) in the course. This was done by printing the return address label in boldface for one group and in regular type for the other. It ensured that there would be no missing data on this item, and that the data would not be distorted by student mis-reporting. Of the 88 responses, 43 (49%) were from students who received A's in the course, and 45 (51%) were from students who received B's. This approximately represents the distribution of grades in the course.

Instruments

The survey was intended to provide an opportunity for students who had completed the course to provide anonymous reactions to particular issues of concern for the course. In particular, the survey explored the balance between exploring personal issues in an academic environment and preserving student privacy, using questions written by me for this purpose. It also included questions to assess what students recalled about their journal-writing, whether they had kept a journal since the course ended, and their class (when they took the course) and type of major (professional or liberal arts).

Next, 44 Likert-type questions assessed aspects of the course, including questions related to privacy. Students responded by circling one of five answers, ranging from "strongly agree" (1) to "strongly disagree" (5). Thus the lower the average score reported, the more strongly students agreed with the statements. By examining the content and intercorrelations of these items, I developed two scales that I will report. One scale assesses student perceptions of the value of the journal ("Value of Journal Scale"). The other assesses students' attitudes toward privacy issues in the class ("Privacy Scale").

Value of Journal Writing

Several questions indicate that students regard journal writing as valuable. Based on item intercorrelations, 18 items were selected to form a scale, the Value of Journal Scale. Item means are presented in the overhead, in order of their mean endorsement. (Recall that low numbers indicate agreement with the items.) The scale consists of 18 items, and has a Cronbach α (alpha) coefficient of 0.94, indicating high internal reliability.

Privacy

A Privacy Scale was similarly developed by examining item content and intercorrelations. It consists of 5 items, with a Cronbach α (alpha) coefficient of 0.82. Items are presented, arranged in order of endorsement, on the overhead.

Feelings, Reactions, and Beliefs Survey (FRBS)

An additional survey was also included: the *Feelings, Reactions, and Beliefs Survey (FRBS)*. This survey measures attitudes related to the personality theory of Carl Rogers. Rogers's concepts about self-actualization might be expected to correlate with the opportunity to explore personal developmental issues in this course and through a personal journal. The instrument is relatively new, with only a few published studies in the literature. The survey is unpublished, and was included with the kind permission of its author, D. Cartwright. Instructions to subjects indicated that, if time were short, they could skip the FRBS questionnaire; 13 did so.

The Feelings, Reactions, and Beliefs Survey (FRBS) consists of 130 Likert-type items, from which 9 scales are scored (Cartwright, 1987). Scale names and reliabilities are presented on the overhead. Past research analyzes these scales separately, rather than combining them into one scale to measure self-actualization process (Cartwright, DeBruin, & Berg, 1991). Scale intercorrelations were similar to those reported in previous research (Cartwright & Mori, 1988). As you can see from the overhead, not all correlations are positive. Three of the scales reflect negative self-actualization, compared to the others: Feeling Uncomfortable with People, Struggling with Feelings of Inferiority, and Feeling Ambivalent in Relationships. This pattern is consistent with past research.

Results

The first three questions were asked primarily to cause students recall the journal in some detail before answering the more detailed questions which followed. They offer descriptive evidence of the topics students wrote about (Question 1) and the people they wrote about (Question 2). Most students recalled writing about their family (89%), social life (88%), dreams (82%) and personal problems (82%). Although they were assigned to be included for everyone, only some students recalled writing about in-class exercises (78%) and assigned readings (67%); this is consistent with my sense that it was a struggle to influence the topics considered by some students, who seemed to want to keep an unstructured diary rather than a more intensive self-exploration journal. Other frequent topics were school classes (74%),school, other than classes (61%), and career planning (52%). Infrequently, students wrote about physical health (28%), sex (26%), and other topics (14%).

The people written about (Question 2) were, in order of frequency: female friends(s) (76%), mother or stepmother (70%), spouse and/or lover(s) (69%), father or stepfather (62%), sister(s) and/or brother(s) (48%), male friend(s) (47%), acquaintances(s) (34%), teacher(s) (34%), grandparent(s) (32%), people I worked with (28%), my boss (20%), other relatives (19%), and other people (19%).

Some students (22%) indicated (on Question 3) other topics they wished they had written more about. Examples of answers include "my feelings," "events in the world," and "dreams."

To my pleasant surprise, 38% of students indicated that they have kept a journal since finishing the class (Question 4). Cross tabulations with other questions indicate that this is unlikely to be due to assignments in other classes, since students who took the class as seniors were more likely to answer "yes" than those who took it as juniors. Unfortunately, I do not have data to indicate how many students had kept journals before the class, and to determine what kinds of journals they kept. From conversations with students, I know that some kept journals for other classes, though these were generally not what I would call "personal journals." Rather, they recorded observations of field experience, such as clinical work by nursing students and classroom observations by student teachers.

Overall, the constructed scales suggest that students considered the journal to be a valuable assignment, and that privacy issues were not particularly troublesome. (See the overheads for these scales.)

The 33 students who reported keeping a journal after the course ended were compared with the 55 who did not. These groups were substantially different on the Value of Journal Scale. Those who kept a journal had more favorable attitudes. This finding should not be surprising, since the attitude literature shows attitude-behavior relationships to be high when both measures focus on a specific behavior (in this case, keeping a journal). Furthermore, since the attitude was assessed at the same time as the behavioral self-report, the attitude cannot be considered to predict the behavior, and may well have been influenced by self-perception processes. Nonetheless, the correlation supports the validity of the Value of Journal Scale.

Those who got A's described the journal as more valuable, while those who got lower grades expressed more criticism of privacy issues. There were no significant correlations of the FRBS with grades, though there was a trend for "A" students to score higher on the Religio-spiritual Beliefs scale (RSB).

FRBS scales were uncorrelated with the Privacy Scale. Two of the nine FRBS scales correlated with the Value of Journal scale. Students who scored high on Openness to Transcendent Experiences (OTE) and those who scored high on Religio-spiritual Beliefs (RSB) rated the journal as more valuable. The Openness to Transcendent Experiences (OTE) finding is consistent with the result (already reported) that students who kept a journal after the class ended tended to score higher on OTE ($p = .053$), but that effect was not found for RSB. I suspect that these correlations were specific to the content of this

course, which emphasized mythology as a metaphor for personal development.

Discussion

These survey results, combined with my own personal reactions to the course, convince me that journal-writing is a valuable activity. It offers the potential for self-exploration, which has been advocated by various therapists and self-development trainers. Experience writing a journal provides students with a skill that can encourage systematic self-examination after the course has ended, which many of them apparently did. The results reported here, and other items not included in the summary scales, indicate that students were generally comfortable with issues of privacy and confidentiality, trusted the teacher to behave ethically and appropriate, and found the journal and the course to be valuable.

However, as my introductory comments indicate, I have some concerns about the ethics of this sort of experiential learning, particularly regarding students' rights to privacy, and the uncertainties and possible harm that could result when teachers know more than they usually do about students' personal issues. I also found myself giving personal advice and discussing serious personal issues with students in my office. Occasionally, I recommended counseling, and some students reported that they contacted college counselors to deal with issues that they had disclosed in the journals. I worried, though, about confronting issues beyond my competence under circumstances that might not be adequately resolved by referring students for professional help. Further, I worried that there might be adverse results of self-confrontation for some students of which I remained unaware. One student confronted me after class, reprimanding me for an exercise that required fantasizing the childhood family environment. "You should have known better," she told me, because of the negative emotions this aroused. (I might also add that other students, who did not know of this interaction, went out of their way to say that it was the best and most powerful class exercise we had done.) This was an isolated incident, but not every student would have the courage to confront an instructor. In addition, I was horrified by reports of assignments by other instructors (outside of psychology) that violated my personal ethical sense.

The Guidelines

To assist other instructors who make journal and experiential assignments, and to encourage the adoption of a systematic set of ethical guidelines to direct instructors who assign personal journals or other class assignments that encourage personal disclosures by students, I offer a set of guidelines to be debated. (See the handout.)

SUGGESTED ETHICAL GUIDELINES FOR JOURNAL ASSIGNMENTS

Students' Rights to Not Disclose

- Students may choose whether to disclose personal material, without consequence for their grades or standing in the course, unless disclosure was announced as a requirement at the outset of the course and students can elect other courses to fulfill their educational requirements.
- Even when disclosure has been accepted as part of the course requirement, students may choose to not disclose particular information or feelings without consequence for their grades or standing in the course.
- If disclosure occurs on written work, such as a personal journal, students may withhold particular entries, not submitting them to the teacher or disclosing them to the class.
- Despite precautions, an experiential course, or events in the personal lives of students unrelated to the class, may make continued disclosure or self-examination too painful. If this occurs early in the course, the best solution may be for the student to drop the course. When it is too late in the term for dropping, instructors and administrators should strive to provide alternative ways of fulfilling course requirements, such as permitting an incomplete or permitting a change in course requirements for the individual student.

Students' Rights to Confidentiality

- Instructors should not discuss personal information about students outside of class (for example, with colleagues). In extraordinary circumstances, however, where there is danger to the student or another person and intervention is warranted, the instructor should communicate with others as necessary to protect those who are in danger.
- The instructor should avoid telling the class what individual students have said to them, in person or in writing. Even "anonymous" descriptions may be unwise, since the specific information could make the student recognizable or uncomfortable, or both.
- If students disclose personal material to one another in class, they should be instructed to not repeat this information outside of class. This advice bears repeating throughout the term. Nonetheless, students should be advised to withhold personal information if a breach of confidentiality would be particularly negative for them.

The Assignment, Grading and Feedback

- The journal should be distinguished from a personal diary by consideration of the techniques used. The specific purpose of the journal assignment should be made clear to the student.
- If the journal is graded, the criteria for grading should be explicit and written. Detailed explanation should be given for terms that students may misunderstand (such as "depth" of consideration).
- In making responses to student journals, faculty should emphasize positive feedback and respect. It may be better to respond on separate paper, rather than violating the personal journal by writing on it.
- The instructor should be able to validate students at a variety of levels of development and in a variety of life circumstances.

Instructor's Interactions with Students

- The instructor should be available to meet with students individually outside of class if they request it, in a private setting (not a shared office, for example).
- Instructors should be prepared to provide specific information to students about counseling resources, such as a telephone number, hours of service, cost, and policies about confidentiality. However, faculty should avoid "referring" students to counseling, recognizing the difference between a suggestion and an instruction.

- Instructors should avoid inappropriate public expressions of concern or caring that might embarrass the student.
- Instructors should be aware that experiential learning often arouses emotions that can be compared to the transference in psychotherapy. They should realize that some of the positive reactions, as well as perhaps negative reactions, of students should not be taken personally.
- The instructor should keep professional boundaries clear in his or her own head and in behavior, to avoid entanglements by students who want to become someone special (and perhaps by the instructor's own needs). Other students are affected when favoritism is suspected.
- Self-disclosure by the teacher should be done thoughtfully. On the one hand, modeling self-disclosure can legitimize and encourage it among students. On the other hand, the particular material may alienate some students when their own experience is quite different.

(Presented for discussion by Susan C. Cloninger, Dept. of Psychology, Russell Sage College, Troy, NY 12180)

References

Adams, K. (1990). *Journal to the self: 22 paths to personal growth.* New York: Warner.

American Association of University Professors (1987). Statement on professional ethics. *Academe, 73,* 49.

American Psychological Association (1982). *Ethical principles in the conduct of research with human participants* (rev. ed.). Washington, DC: Author.

American Psychological Association (1990). Ethical principles of psychologists (amended June 2, 1989). *American Psychologist, 45,* 390-395.

Anderson, J. (1993). Journal writing: The promise and the reality. *Journal of Reading, 36,* 304-309.

Baker, M. G. (1987). The teacher's need to know versus the student's right to privacy. *Journal of Law and Education, 16,* 71-91.

Bell, L., & Schniedewind, N. (1989). Realizing the promise of humanistic education. *Journal of Humanistic Psychology, 29,* 200-223.

Berry, E., & Black, E. (1987). The integrative learning journal (or, getting beyond "true confessions" and "cold knowledge"). *Women's Studies Quarterly, 15*(3-4), 59-64.

Bowman, R. F., Jr. (1983). The personal student journal: Mirror of the mind. *Contemporary Education, 55,* 24-27.

Cangemi, J. F. (1984). The *real* purpose of higher education: Developing self-actualizing personalities. *Education, 105,* 151-154.

Cartwright, D. (1987). Manual for the Feelings, Reactions, and Beliefs Survey. FRBS Technical Report No. 87-1. Unpublished paper. Boulder, CO: University of Colorado.

Cartwright, D., & Mori, C. (1988). Scales for assessing aspects of the person. *Person-Centered Review, 3,* 176-194.

Cartwright, D., DeBruin, J., & Berg, S. (1991). Some scales for assessing personality based on Carl Rogers' theory: Further evidence of validity. *Personality and Individual Differences, 12,* 151-156.

Connors, P. E. (1988). Making private writing public: Teaching expressive writing in the composition class. *Teaching English in the Two-Year College, 15,* 25-27.

Fulwiler, T. (1987). Guidelines for using journals in school settings. Approved by the NCTE Commission on Composition. Urbana, IL: National Council of Teachers of English. (ERIC Document Reproduction Service No. ED 282 232)

Gluckman, I. (1987). Student privacy and school responsibility. *Legal Memorandum.* Reston, VA: National Association of Secondary School Principles. (ERIC Document Reproduction Service No. ED 279 064)

Heath, G. (1988). Journals in the classroom: One teacher's trials and errors. *English Journal, 77,* 58-60.

Hedlund, D., et al. (1989). A dialogue with self: The journal as an educational tool. *Journal of Humanistic Education and Development, 27*(3), 105-113.

Heinze, C. (1987). Gaining insight through "journaling." *Academic Therapy, 22,* 489-495.

Hesford, W. S. (1990). Storytelling and the dynamics of feminist teaching. *Feminist Teacher, 5*(2), 20-24.

Hettich, P. (1990). Journal writing: Old fare or nouvelle cuisine? *Teaching of Psychology, 17,* 36-39.

Holland, R. M., Jr. (1989). Anonymous journals in literature survey courses. *Teaching English in the Two-Year College, 16,* 236-241.

Jenkinson, E. (1989). Classroom questions: Respect for student privacy isn't asking too much. *American School Board Journal, 176,* 27-30.

Jolley, J. M., & Mitchell, M. L. (1990). Two psychologists' experiences with journals. *Teaching of Psychology, 17,* 40-41.

McManus, J. L. (1986). "Live" case study/journal record in adolescent psychology. *Teaching of Psychology, 13,* 70-74.

Pennebaker, J. W., & Beall, S. K. (1986). Confronting a traumatic event: Toward an understanding of inhibition and disease. *Journal of Abnormal Psychology, 95,* 274-281.

BEST COPY AVAILABLE

Pennebaker, J. W., Colder, M., & Sharp, L. K. (1990). Accelerating the coping process. *Journal of Personality and Social Psychology, 58,* 528-537.

Pennebaker, J. W., Kiecolt-Glaser, J. K., & Glaser, R. (1988). Disclosure of traumas and immune function: Health implications for psychotherapy. *Journal of Consulting and Clinical Psychology, 56,* 239-245.

Pietrofesa, J. J., et al. (1990). The mental health counselor and "duty to warn." *Journal of Mental Health Counseling, 12,* 129-137.

Rainer, T. (1978). *The new diary: How to use a journal for self-guidance and expanded creativity.* Los Angeles: Tarcher.

Ritchie, J. S. (1990). Confronting the "essential" problem: Reconnecting feminist theory and pedagogy. *Journal of Advanced Composition, 10,* 249-273.

Rogers, C. R. (1969). *Freedom to learn: A view of what education might become.* Columbus, OH: Chas. E. Merrill.

Rogers, C. R. (1974). Can learning encompass both ideas and feelings? *Education, 95,* 103-114.

Rosenwald, L. (1987). Some myths about diaries. *Raritan, 6,* 97-112.

Roscoe, B., & Peterson, K. L. (1982). Teacher and situational characteristics which enhance learning and development. *College Student Journal, 16,* 389-394.

Singer, M. (1990). Responding to intimacies and crises in students' journals. *English Journal, 79*(5), 72-75.

Stanley, L. C. (1989). "Misreading" student journals for the views of self and society. *Journal of Basic Writing, 8,* 21-31.

Sullivan, A. M. (1989). Liberating the urge to write: From classroom journals to lifelong writing. *English Journal, 78*(7), 55-61.

Thomas, H. F. (1988). Keeping person-centered education alive in academic settings. *Person-Centered Review, 3,* 337-352.

Walden, P. A. (1988). A learning journal as a tool to promote lifelong learning. *Feminist Teacher, 3*(2), 14-17, 35.

Ware, M. E., & Perry, N. W. (1987). Facilitating growth in a personal development course. *Psychological Reports, 60,* 491-500.

Wershoven, C. (1991). Personal writing in the composition class: When the personal is dangerously political. *Writing Instructor, 11,* 31-37.

PRIVACY SCALE

5 ITEMS
ALPHA = .8171, STANDARDIZED ITEM ALPHA = .8203

ITEM	MEAN	QUESTION
Q04	3.0500	Students should not be required to submit personal journals for their instructors to read.
Q12	3.0500	You should be free to write anything you want, and no one else should read it -- even the instructor.
Q29	3.0875	I would have written more about certain people or topics if the journal did not have to be handed in.
Q09	3.6125	I wish the instructor had not read my journal.
Q03	3.9125	Journal-writing as a class assignment is a violation of students' privacy.

KEY TO LIKERT-TYPE SCALE LABELS:
1 strongly agree
2 agree
3 neutral
4 disagree
5 strongly disagree

VALUE OF JOURNAL SCALE

18 ITEMS
ALPHA = .9431, STANDARDIZED ITEM ALPHA = .9448

ITEM	MEAN	QUESTION
Q01	1.7561	Journal-writing is valuable for self-development.
Q02	1.8049	I am glad that the journal was assigned.
Q05	1.8049	I am glad that I kept a journal for The Self.
Q17	1.8415	I learned useful techniques for keeping a personal journal.
Q18	1.9268	My journal is a valuable record for me of that period of my life.
Q23	2.0000	Journal writing helped me to understand myself better.
Q25	2.0732	Journal writing helped me to cope with particular problems in my life.
Q24	2.0732	Journal writing helped me identify issues that I want to work on.
Q07	2.1585	Journal writing helped me to know my own goals and values.
Q22	2.2561	Journal writing helped me develop my creativity.
Q26	2.3171	Journal writing helped me to accept myself more.
Q21	2.3780	Journal writing helped me develop more of my potential as a person.
Q31	2.4024	There are topics I wish I had explored in more depth.
Q06	2.5122	I expect to keep a journal for myself in the future.
Q40	2.5244	I wrote some things in the journal that I had never told anyone.
Q19	2.5610	My journal will be valuable for posterity.
Q33	2.7683	There are topics I wish I had discussed (more) with the instructor.
Q32	3.1220	There are topics I wish I had discussed (more) with classmates.

KEY TO LIKERT-TYPE SCALE LABELS:
1 strongly agree
2 agree
3 neutral
4 disagree
5 strongly disagree

FEELINGS, REACTIONS, AND BELIEFS SURVEY (FRBS)*

(9 Scales)

SCALE		# ITEMS	ALPHA	STANDARDIZED ITEM ALPHA
FCA:	Focusing Conscious Attention	20	.8064	.8126
OFR:	Openness to Feelings in Relationships	20	.7350	.7506
TSO:	Trust in Self as an Organism	20	.7952	.8006
FFP:	Fully Functioning Person	15	.8583	.8621
FUP:	Feeling Uncomfortable with People	15	.9030	.8999
SFI:	Struggling with Feelings of Inferiority	15	.7605	.7652
FAR:	Feeling Ambivalent in Relationships	8	.6867	.6817
OTE:	Openness to Transcendent Experiences	8	.6402	.6252
RSB:	Religio-spiritual Beliefs	8	.7694	.7863

*FRBS by D. S. Cartwright (© 1987). Used by permission.

WHO HAS KEPT A JOURNAL AFTER THE COURSE?

COMPARISONS OF THOSE WHO SAY THEY HAVE WITH THOSE WHO SAY THEY HAVEN'T

	KEPT JOURNAL (n = 33)	DIDN'T KEEP JOURNAL (n = 55)	
Value of Journal Scale (low = more valuable)	34.3 (33)	44.5 (50)	p=.000
Privacy Scale (low = more criticism)	17.1 (31)	16.5 (53)	
FRBS SCALES:			
Focusing Conscious Attention (FCA)	66.9 (30)	68.3 (42)	
Openness to Feelings in Relationships (OFR)	76.8 (30)	76.8 (42)	
Trust in Self as Organism (TSO)	68.5 (30)	65.0 (42)	
Fully Functioning Person (FFP)	48.0 (30)	51.3 (42)	
Feeling Uncomfortable with People (FUP)	35.4 (30)	32.3 (42)	
Struggling with Feelings of Inferiority (SFI)	44.4 (30)	41.4 (42)	
Feeling Ambivalent in Relationships (FAR)	22.3 (30)	20.1 (42)	p=.090
Openness to Transcendent Experiences (OTE)	24.3 (30)	22.0 (42)	p=.053
Religio-spiritual Beliefs (RSB)	28.7 (30)	29.6 (42)	

Numbers in parentheses indicate n for each mean.

CORRELATIONS OF JOURNAL VALUE AND PRIVACY SCALES WITH FRBS SCALES

	JOURNAL VALUE SCALE (low = more valuable)	PRIVACY SCALE (low = more criticism)
FRBS SCALES:		
Focusing Conscious Attention (FCA)	-.08	.18
Openness to Feelings in Relationships (OFR)	-.14	-.01
Trust in Self as Organism (TSO)	-.06	.21
Fully Functioning Person (FFP)	.00	.11
Feeling Uncomfortable with People (FUP)	-.00	-.01
Struggling with Feelings of Inferiority (SFI)	-.12	-.13
Feeling Ambivalent in Relationships (FAR)	-.08	-.18
Openness to Transcendent Experiences (OTE)	-.43**	.16
Religio-spiritual Beliefs (RSB)	-.33*	.17

n = 65 for all correlations
* p < .01
** p < .001

HOW DO COURSE GRADES RELATE TO THESE MEASURES?

	GRADE = A (n = 43)	GRADE = B OR LOWER (n = 45)	
Value of Journal Scale (low = more valuable)	36.4 (39)	44.1 (44)	p = .002
Privacy Scale (low = more criticism)	17.9 (41)	15.6 (43)	p = .008
FRBS SCALES:			
Focusing Conscious Attention (FCA)	68.6 (34)	66.9 (38)	
Openness to Feelings in Relationships (OFR)	76.9 (34)	76.7 (38)	
Trust in Self as Organism (TSO)	66.1 (34)	66.8 (38)	
Fully Functioning Person (FFP)	48.1 (34)	51.6 (38)	
Feeling Uncomfortable with People (FUP)	35.2 (34)	32.2 (38)	
Struggling with Feelings of Inferiority (SFI)	43.7 (34)	41.6 (38)	
Feeling Ambivalent in Relationships (FAR)	21.3 (34)	20.8 (38)	
Openness to Transcendent Experiences (OTE)	23.7 (34)	22.4 (38)	
Religio-spiritual Beliefs (RSB)	30.3 (34)	28.2 (38)	p = .095

Numbers in parentheses indicate n for each mean.

INTERCORRELATIONS OF THE FRBS SCALES

	FCA	OFR	TSO	FFP	FUP	SFI	FAR	OTE
OFR	.04							
TSO	-.03	-.27						
FFP	.23	-.05	.46**					
FUP	-.08	-.11	-.28*	-.56**				
SFI	-.37**	.04	-.33*	-.65**	.55**			
FAR	-.20	-.28*	.05	-.39**	.40**	.47**		
OTE	-.12	-.11	.33*	.00	.00	-.09	.21	
RSB	.11	.07	-.20	-.03	-.00	-.13	-.14	.33*

* $p < .01$
** $p < .001$

ABBREVIATIONS FOR THE FEELINGS, REACTIONS, AND BELIEFS SURVEY (FRBS) SCALES:

FCA:	Focusing Conscious Attention
OFR:	Openness to Feelings in Relationships
TSO:	Trust in Self as Organism
FFP:	Fully Functioning Person
FUP:	Feeling Uncomfortable with People
SFI:	Struggling with Feelings of Inferiority
FAR:	Feeling Ambivalent in Relationships
OTE:	Openness to Transcendent Experiences
RSB:	Religio-spiritual Beliefs

What topics do you remember writing about in your journal? Check all that apply: [RESPONSES REARRANGED IN ORDER OF FREQUENCY]

78/88	(89%)	___ family
73/88	(83%)	___ social life
72/88	(82%)	___ dreams
72/88	(82%)	___ personal problems
69/88	(78%)	___ in-class exercises
65/88	(74%)	___ school (classes)
59/88	(67%)	___ assigned readings
54/88	(61%)	___ school (other than classes)
46/88	(52%)	___ career planning
25/88	(28%)	___ physical health
23/88	(26%)	___ sex
12/88	(14%)	___ other (What?_____)

What people do you remember writing about in your journal? Check all that apply: [RESPONSES REARRANGED IN ORDER OF FREQUENCY]

67/88	(76%)	___ female friend(s)
62/88	(70%)	___ mother or stepmother
61/88	(69%)	___ spouse and/or lover(s)
55/88	(62%)	___ father or stepfather
42/88	(48%)	___ sister(s) and/or brother(s)
41/88	(47%)	___ male friend(s)
30/88	(34%)	___ acquaintance(s)
30/88	(34%)	___ teacher(s)
28/88	(32%)	___ grandparent(s)
25/88	(28%)	___ people I worked with
18/88	(20%)	___ my boss
17/88	(19%)	___ other relatives
17/88	(19%)	___ other (Who? _____)

Are there any topics or people you wish you had written more about?

22/82	(27%)	___ YES (What or who?___)
60/82	(73%)	___ NO

Have you kept a journal since finishing the class?

33/88	(38%)	___ YES
55/88	(62%)	___ NO

When you took the course, what class were you?

54/87	(62%)	___ Senior
30/87	(34%)	___ Junior
2/87	(2%)	___ Sophomore
1/87	(1%)	___ other [graduate student]

What is your major (or, if you are a double major, which is your primary identification)?

69/87	(79%)	___ a professional program
18/87	(21%)	___ a liberal arts program

COURSE GRADE [from SASE address label]

43/88	(49%)	A [boldface]
45/88	(51%)	B or lower [regular type]

BENEFITS OF JOURNAL ASSIGNMENTS

- encourages student personal development, which may have particular academic implications for those preparing for careers in human services and related areas
- enables teachers to better understand the environment and life situations of their students (taken collectively, as well as individually)
- teaches skills for individual use of journals beyond the course
- facilitates mentoring of students in academic as well as nonacademic areas
- facilitates more open communication with students that carries over to other classes
- corrects an overly intellectualized approach to psychological material

---

DRAWBACKS OF JOURNAL ASSIGNMENTS

- time-consuming to grade
- creates tension with students whose work is superficial and who expect an easy A so they can devote time to more academic courses, or who lack sufficient self-criticism to see their superficiality
- students may feel they are being graded for their personality or personhood, rather than their work
- raises issues of student privacy
- raises issues of rights to privacy of those written about (e.g., other students; other teachers; other college personnel)
- raises issues of teacher's responsibility for student well-being, and student expectation about such action
- raises issues of teacher's responsibility for acting on personal information, vis a vis the student and others, and student expectations about such action
- raises issues of students' resources for dealing with troublesome material that the assignment may arouse
- raises issues of teacher's emotional reactions to students (similar to positive or negative countertransference)

SUGGESTIONS TO FACULTY WHO ASSIGN PERSONAL JOURNALS

- allow time to deal with the unexpected
- criteria for grading need clear explication
- journals must be checked frequently or some students will try to catch up on several weeks work in one day (which may work for academic papers but cannot fulfill the goals of a journal)
- know who you will consult if you need a second opinion on difficult decisions
- encourage students to keep some entries private (not turn them in)
- Direct students to not discuss, outside of class, personal material disclosed by others in class.
- be available to students individually if they request it, in a private setting (not a shared office, for example)
- know the counseling resources on campus. Know the specific ways a student can make contact (e.g., phone number, hours, etc.) and be able to explain their procedures and policies (e.g., about protecting student confidentiality). Make it clear that the counseling center will not be reporting back to you.
- know how to suggest counseling without implying pathology
- don't talk about journal entries with other faculty, except in very general terms
- compile a reading list of self-help books (incorporating students' suggestions)
- keep a journal yourself
- keep professional boundaries clear in your own head and in your behavior, to avoid entanglements by students who want to become someone special (and perhaps by your own needs). Realize that other students are affected whenever favoritism is suspected.
- realize the need to validate students at a variety of levels of development and in a variety of life circumstances

BEST COPY AVAILABLE

SEMINAR IN AGGRESSION

Presented at the 8th Annual Conference on Undergraduate Teaching of Psychology: Ideas & Innovations.

by

Matthew Margres
Department of Psychology
Saginaw Valley State University
7400 Bay Road
University Center, Michigan
48710

&

Mark Margres
J.F.K. Medical Center
Edison, New Jersey

ORIGIN OF THE COURSE

Saginaw Valley State University is a teaching institution of approximately 7,000 students. As a reflection of the school's liberal arts orientation, we wanted to offer our students a series of capstone courses -- courses to illustrate the diversity of views across disciplines. In other words, we want our graduates to appreciate the value of approaches outside their major field of study.

A committee was formed to explore the possibilities for such courses. The committee distributed requests for course proposals (including a stipend for the course coordinator), and decided upon a proposal from the Psychology Department: Seminar In Aggression. This topic was clearly a good choice, as the course overloaded in registration and was repeated the following year. In the past 4 years, Saginaw Valley State University has offered 5 different Interdisciplinary courses, and is progressing towards the goal of regular, capstone offerings.

ORGANIZATION

In choosing a topic, I wanted one of which I was knowledgeable, that offered a variety of approaches within Psychology, and was of strong, general interest. Aggression not only fulfills these requirements, it appears to be a persistently timely topic. One needs only to look at a newspaper for the most recent topics of aggression.

I next distributed letters to the chairs of the other departments within the Arts & Behavioral Sciences, asking them to share the course description with their faculty. In addition, I asked that any faculty interested in being a guest speaker (for a modest stipend), need only contact me for the details.

The response was very encouraging. I had tried to clarify that the topics for presentation were very open, as were the styles and forms of presentation. All I asked was that a clear theme of aggression be present. I need not had worried. I asked each potential guest for two or three possible topics, and received an excess.

The variety of topics allowed me to organize the course into four coordinated sections, as can be seen in the syllabus at the end of this paper. Also, each guest supplied me with one or more readings to help prepare the students for their presentation.

Section One involved definitions and measures of aggression, as well as the role of stress. It concluded with Philosophies' review of justifications for aggression, especially warfare.

Section Two began with the biological determines of stress such as brain mechanisms and hormones. A gradual transition was then made from animal models and physiological research, to comparative psychology -- including the hunting and warring strategies of chimpanzees.

Section Three began with a review of Social Psychology, gradually leading to Sociologies' presentation on juvenile delinquency. The section ended with a presentation from Communication & Theater, reviewing aggression rituals.

Section Four focussed on police procedures and some contemporary cases of police violence (Criminal Justice presented). This lead discussion into the politics (Political Science presented) of police procedures, and eventually a return to the politics and justification of war.

MECHANICS

I adopted a standard format for preparing the class for the presenters. Each presenter gave me background information on their topic, as well as a required reading for the class. I reviewed this information early, and met briefly with each presenter to clarify the information before the actual presentation.

The class lecture preceding each guest was dedicated to a review of the readings, and preparing discussion questions for the presenter (based upon contemporary events, and the readings). These questions lead to productive discussion after the guest's prepared presentation. It is important for me to note that I took copious notes during these lectures, which I later reviewed with the guest. So doing enabled me to prepare an organized review for the next class period, ensuring that the class had an organized review of the discussions.

SUMMARY POINTS

The readings, prep time spent in lecture, and the requirement of discussion questions were very successful in stimulating class involvement. Without exception, each guest told me how impressed they were by the knowledge of the students, and the depth of their questions. We held a panel discussion at the end of the semester, including not only our guests, but other interested faculty. It was during that discussion that many of the similarities and contrasts across disciplines became clear -- much to the benefit (and sometimes amusement) of the class.

I found that contemporary, real-life events were extremely profitable when included in this course. Ongoing cases of police aggression (my guest was a former Detroit Police Sergeant), warfare (The Gulf War, Somalia, Bosnia,...), domestic violence, etc..., when reviewed from a professional's perspective, and very informative.

It had been my original intention to include a Clinical Psychologist as a guest. Unfortunately, the guest I had originally scheduled suffered a loss of funding, resulting in a loss of half their staff, and no time to spare for preparing and delivering such a talk. For the presentation, however, I was able to arrange for the Emergency Room Psychologist from J.F.K. Medical Center (Edison N. J.) to take part.

THE WORK OF AN EMERGENCY ROOM PSYCHOLOGIST

To give you an idea of what I do; I'm a clinical psychologist, and I work at J.F.K. Medical Center which is in the central part of New Jersey. It's one of the largest teaching hospitals in the state of New Jersey. In our emergency department we see between four and five thousand difficult patients a year, and most of those people present for acute treatment when they can't get a hold of their therapist. Being involved as a crisis intervention specialist, I generally get involved in almost every emergency situation that has some emotional component. That's not just limited to people with obvious psychiatric difficulties. For instance, we have people who come in who are severely injured, people who have been killed, and patients who expired within the hospital. Their family members have to be dealt with. We have people come in, who are criminals that are presented to us by the local police departments and the State Penitentiaries. The State Penitentiary in New Jersey is only 5 miles from the hospital. Very often those people are brought to our emergency department with a request for psychiatric or medical evaluation. This presents yet another potential problem. Also we get people who are substance abusers, who are presented intoxicated, or under the influence of some kind of narcotics. In all of these cases, there is potential for violence.

I'd like to give you a better idea of what I need to do. In many cases, the first thing to do is either sit down and speak with a family member or a friend, or find another way to get some kind of background information on the person that you're dealing with. Unfortunately, that's not always possible. We get people who aren't responsive, people who are homeless on the street, and people who are psychotic. But the first thing that I try to do is obtain some kind of documented information from a significant other. The next step in the evaluation process is to ask the patient some pointed, but very definitive questions. What I'm searching for is real simple answers to give me an idea whether or not this person is dangerous and/or psychotic. For example, you have suicidal people who come in with their wrists ripped open and they'll tell you that they just fell and hurt themselves. You have people who took 100 Tylenol and they'll tell you they were just taking them on and off during the day because they had a headache. While you listen to what they're telling you, by their nonverbal cues it's pretty obvious that these people are suicidal and that they're actually trying to harm themselves. Identifying such cues is an important aspect of my job. You can't learn that from a book, and I can't tell you how I do it, all I can say is that I've been doing this for 12 years and you develop a sense of what you need to know.

Once you identify a violent patient, there are a couple ways that they can be treated. The first thing you need to do is some kind of therapy. Generally, in the emergency department, I'm not looking for a long term relationship with my patient. What I need to do is give support treatment to make the patient less anxious, so we can make a proper diagnosis and steer the patient to proper treatment. The second way that potentially violent patients are managed is behaviorally. That could come from having a friend or spouse talk to the patient in the emergency department while he or she is laying on the stretcher. Or, it could require putting restraints on someone who is physically violent and/or notifying security that they need to watch the patient on a 24

hour basis. The third way that we manage patients is chemically. This involves the use of antidepressants, tranquilizers, and sometimes psycho-tropic drugs (although not very often). Once the management procedures have been established, we need to evaluate for a physician. Again, in the emergency department we don't want to have people hanging out here for hours and hours -- what we need to do, following the evaluation, is decide if the patient can be managed on an out-patient basis. If so, we give a referral to a psychiatrist, an M.S.W., or another specialist. The next step would be a voluntary hospitalization. We try to convince the patient that he or she is compromised to the point that it's not safe for them to be out there in public, and that treatment could resume in the establishment. The third option would be an involuntary hospitalization or a commitment. Generally, this is done for those are people who are homicidal or suicidal, such that they cannot take care of themselves. Now, I'd like to give you a couple of examples of what I need to deal with.

An obvious psychotic patient, we have a 40 year old white male presented to the emergency department with a history of bi-polar disorder. He had been seeing a psychiatrist on an out-patient basis, and was medicated with lithium. However, he wasn't in compliance with his medication, and he had a history of becoming behavioral agitated. It seems that at 3:00 in the morning he killed his family dog, with his bare hands, on the front lawn. He then began to direct his homicidal rage to his wife and children. They in turn contacted the police, who handcuffed this enormous man and brought him to the emergency department for evaluation. Now try to get this picture: I'm talking about an emergency department where many people are brought in for treatment, and where stretchy blue curtains are all that separate the beds. There are very few isolation rooms. and This guy presents at about 4:00 in the morning, laying on a stretcher, with his hands handcuffed behind his back. Now that's not a very therapeutic position, and I can't do an evaluation that way. We needed to transfer him from the handcuffs to four-point restraints. To do that we had three police officials with us, and our entire security force. It turned out not to be enough to handle him. The minute they uncuffed him he jumped off the stretcher, pulled out one of the police officers' guns, cocked it, and was about to pull the trigger when I jumped over the counter and knocked the gun out of his hands. We had about 12 people managing this guy before we got him in four point restraints. He was eventually committed, and following commitment he was also prosecuted for this case. This person had obvious homicidal rage, and obvious homicidal intentions. He told me point blank that he would have killed his family. I believed him.

That was an example of an obvious case of potential violence. Something else presented appearing to be more or less harmless. I had an 80 year old white female presented that had stabbed her husband 30 times in the chest with a 10-inch fillet knife that had been given to her by her daughter-in-law as a present. You want to talk about some cognitive dissonance, when the daughter-in-law showed up in the hospital emergency department, she discovered that her mother-in-law killed her father with this knife. It seemed that this woman had developed Alzheimer's Disease without the family knowing it. She had become delusional, and told us that her 86 year old husband, whom she had been married to for 55 years, was having an affair. She just went into the kitchen, pulled the knife out, and stabbed him in the chest thirty times. He eventually

succumbed in the emergency room. This person was committed to a private psychiatric facility and eventually to a nursing home. Here's a situation where this woman gave absolutely no indication to anyone in her family that there was any kind of problem, and wasn't giving any outward signs that she was out of touch with reality, but in the middle of the night she jumped out of bed and killed her husband.

As a final example, there was a presentation that was strictly for medical reasons. We had an extremely overweight woman that had never had emergency medical attention in her life. She had been living at home with her family, spoke only broken English, and her condition had deteriorated until she could no longer communicate with her family. Her family felt that there was some problem when they noticed she was getting agitated, so they brought her to the emergency department. We contacted her personal doctor and found out she had a history of low blood sugar, so it came upon us to test her. Predictably, they asked me to hold this very large lady, who was strong and violent, and they further asked me to hold her finger for a finger stick. They just need to stick a little needle in her finger, to get a quick analysis, to find out if her blood sugar is low. While I was holding her thumb, she freed her other arm from the security guard, reached up, grabbed my finger, bent it back and broke it in two places (Here Mark displays an old football injury where his repeatedly broken finger tends to stick out). Now here's someone that you would not think of as particularly dangerous.

I have to be honest with you, I've become somewhat cynical regarding everyone that comes into my emergency room. Working in such a psychiatric facility, I tend to be suspicious that something going to go wrong. For the sake of my patients', as well as my own health, I need to be prepared for aggressive acts. I hope this review helps you achieve some sense of what it is like to work with potentially violent people.

PSYCHOLOGY 491 - SEMINAR IN AGGRESSION
CROSS-LISTED: C&T 491, CJ 491, PHIL 491, PS 491 & SOC 491
FALL, 1992

Instructor:	Dr. Matthew Margres
Office:	Brown Hall, Room 162
Office Phone:	790-5640
Office Hours:	Monday & Wednesday, 10:30-12:30 p.m. or by appointment.
Class Meets:	Tuesday & Thursday, 12:30-2:20 p.m.
Classroom:	W259

Required Text: Human Aggression, by Geen.

Seminar Points: Discussion is an essential aspect of any seminar. Through such discussion, original ideas are generated and enhanced. To this extent class time is reserved before and after each Guest Lecture, to prepare for and review that information, respectively. There will be 90 points available for these sessions. Details will be given the first day of class.

Term Paper: A principal focus of an Interdisciplinary Course is to synthesize and distinguish aspects of diverse disciplines. Indeed, synthesis and distinction will be two of the "Themes" of this course. A Final Paper, worth 100 points, will be due the day and time of the Final Exam. This paper will focus upon a single topic of the students' choosing, and review a minimum of 4 approaches to this topic. Details will be given the first day of class.

Examinations: There will be four (4) regularly scheduled sectional exams. These will include multiple-choice, short answer, and essay questions. Each exam is worth 100 points. However, at the end of the semester your lowest grade will only count as 1/2 of a test. Therefore, the 4 exams total to 350 possible points.

Grading: Available points are 90 for Seminars, 100 for Paper, and 350 for Tests, totaling 540 points. Your final grade will be determined by the percentage of the 540 points you acquire:

90-100%	=	A
80-89.5%	=	B
70-79.5%	=	C
60-69.5%	=	D
below 59.5%	=	F

Final Points: Organizing 6 Guest Speakers, from 6 different Disciplines, at the same times, during a single semester; is complex. There is some slight possibility of changes in the lecture schedule.

The most challenging (and profitable) aspect of this course is the focus on one topic, from many disciplines. **DO NOT HESITATE** to bring to my attention any difficulties or problems you have in my course.

COURSE OUTLINE

DAY/DATE		LECTURE TOPIC(S)	CHAPTER(S)
		Section One: Definitions, Justifications and Stress	
Tue	9/1	Intro to Course/Requirements	
Thur	9/3	Methods and Definitions	1
Tue	9/8	**Labor Day -- No Class**	
Thur	9/10	Stress and Aggression	2
Tue	9/15	Alternatives	
Thur	9/17	Prep for Guest #1	Reading #1
Tue	9/22	Guest #1: Philosophy	
Thur	9/24	Summary and Test Review	
Tue	9/29	**EXAM ONE**	1 & 2, Reading #1
		Section Two: Biology and Psychology	
Thur	10/1	Biology "Basics"	7
Tue	10/6	Prep for Guest #2	Reading #2
Thur	10/8	Guest #2: Biology	
Tue	10/13	Biological Psychology	6
Thur	10/15	More Psychology	3
Tue	10/20	Summary and Test Review	
Thur	10/22	**EXAM TWO**	3, 6, & 7, Reading #2
		Section Three: Social Aspects	
Tue	10/27	Social Psychology	4 & 5
Thur	10/29	Prep for Guest #3	Reading #3
Tue	11/3	Guest #3: Sociology	
Thur	11/5	Prep for Guest #4	Reading #4
Tue	11/10	Guest #4: Communication & Theatre	
Thur	11/12	Summary and Test Review	
Tue	11/17	**EXAM THREE**	4 & 5, Reading #3 & #4
		Section Four: Legal and Political Aspects	
Thur	11/19	Prep for Guest #5	Reading #5
Tue	11/24	Guest #5: Criminal Justice	
Thur	11/26	**Thanksgiving - NO Class**	
Tue	12/1	Prep for Guest #6	Reading #6
Thur	12/3	Guest #6: Political Science	
Tue	12/8	Themes Review/Panel Discussion	8
Thur	12/10	Summary and Test Review	
Tue	12/15	**FINAL EXAM - 12:30 a.m.**	8, Reading #5 & #6

165

John B. Morganti, Michael J. Zborowski
and Robert P. Delprino

Department of Psychology
State University College at Buffalo
Buffalo, NY 14222

PSYCHOLOGY MAJORS ASSESSMENT OF THEIR UNDERGRADUATE EXPERIENCE:

1973 TO 1993 SUC AT BUFFALO

*Presented at the 8th Annual Conference on Undergraduate Teaching of Psychology: Ideas and Innovations; Ellenville, New York, March 16-18, 1994.

Abstract

A questionnaire that solicited information on retrospective satisfaction and activities/career/training since graduation was mailed to all identifiable living graduates of the Psychology program at State University College at Buffalo (n=624). Examination of the quantitative and qualitative (open-ended questions) data for the 204 completed surveys indicated high overall satisfaction with the program and generally high personal achievement since graduation. Involvement in specialized experiences as an undergraduate strongly mediated satisfaction. Our efforts to continue and expand the availability of specialized experiences such as internships and independent study are discussed.

Real and perceived inadequacies in student performance from elementary through graduate school have led to nationwide efforts aimed at educational reform for more than a decade. A focal thrust of this reform has involved attempts to identify and measure specific and general competencies associated with a particular level of schooling (e.g., Astin, 1991; Assessment at SUNY, 1992). The State University of New York (SUNY) formalized its assessment concerns in a 1989 policy that committed the university to a program of assessment in skill and knowledge acquisition and an examination of college education on student attitudes and values (Burke, in Assessment at SUNY, 1992).

Another important avenue to educational outcome assessment rests in determining the current levels of satisfaction of graduates with both general and specific features of their college education, especially their major. The perceived contribution of that education to their perceived (and actual) real world achievement is especially important.

Our department places a high priority on efforts to strengthen the quality of our program. As part of this continuing effort, we survey all graduating seniors to solicit feedback about their perception of the strengths and weaknesses of their training in psychology and their immediate post graduation plans. While this feedback has been valuable; its usefulness is tempered by the fact that these students have yet to test their training and experience against the outside world, have yet to test their goals and aspirations against a competitive reality.

For this reason, we occasionally survey recent graduates, out to several years after graduation, to learn more about their post graduation experience. In our most recent effort we decided to attempt to survey all our identifiable graduates of the last 20 years (1973-93) in an effort to provide a more complete assessment of our program and its graduates.

Materials and Methods

A questionnaire (Appendix A) was developed by the authors that included items that asked respondents to retrospectively rate their satisfaction with specific and general features of their undergraduate training and associated experiences (e.g., perceived academic standards of the department; availability of faculty outside class, overall quality of instruction, etc.). Data on the nature, area, and level of any postgraduate education and current employment status/job duties were also gathered.

The questionnaire, an accompanying letter of solicitation, and a stamped return envelope were mailed to all identifiable living graduates (n=624) of the SUC at Buffalo Psychology Department for the period 1973 to 1993. A total of 204 completed questionnaires were returned and 46 packets were returned as undeliverable (204/578 = 35% response rate).

Results and Discussion

These data were subjected to a variety of analyses, both across the entire sample and broken out for a variety of identifiable subgroups (e.g., blocked on graduation year).

Regression analyses that used a variety of predictors (e.g., level of involvement in specialized experiences such as independent study) to estimate rated satisfaction and post graduate training were also completed.

A frequency count of completed surveys by year of graduation yielded the following quartile splits: 1973-79 (N=46); 1980-86 (N=53); 1987-90 (N=51); 1991-93 (N=53). The preponderance of responses from more recent graduates appears to reflect both the greater numbers of graduates as the program grew and the likelihood that addresses were current (almost all the undeliverable packets were for pre-1987 graduates).

Overall, respondents provided very favorable feedback about their undergraduate experience, the quality of their training, and their level of preparation to undertake professional responsibilities. On a scale of 1 (poor) to 5 (excellent), the mean rating of individual items generally exceeded 4 (good) and were as follows: faculty interest/concern in helping students meet academic needs (4.09); quality of instruction (4.29); availability of faculty outside of class (4.06); availability of opportunities for specialized academic experiences (3.80); academic standards of department (4.20); faculty involvement/enthusiasm (4.03); quality of extra-curricular activities (4.06); academic experience at SUCB outside of psychology (3.69); the psychology department, overall (4.29); contribution to personal growth and development (4.13); and level of preparation for advanced studies (4.31). (Appendix A). When asked whether they would recommend the psychology department at

SUCB to potential students, 185 respondents indicated that they would do so with 99 indicating that they would offer a strong endorsement. Only 5 respondents (2%) indicated they would not recommend the psychology department to others. An examination of responses across graduation year yielded no differences, suggesting that, in the opinion of our alumni, the psychology curriculum has been consistently strong.

A regression analysis designed to evaluate the specific dimensions that were most related to the overall evaluation of the psychology program revealed that faculty interest/concern in helping students, high academic standards, and the degree to which the psychology program contributed to students' personal growth and development, respectively, were most predictive of the overall evaluation of the department item and accounted for 45% of the variance.

Of our total sample, 96 respondents have since gone on to earn advanced degrees in psychology and other areas (Appendix A) while 53 are currently enrolled in graduate or professional school (full or part-time). An appraisal of current employment status revealed that 7 (3.4%) respondents are currently unemployed but seeking work, 8 (3.9%) are unemployed by choice (modal reason was to raise a family), 110 (53.9%) who are employed in a field related to psychology, 74 (36.3%) who are employed in a field unrelated to psychology and 5 (2.5%) who did not answer the question. Moreover, while not surprising, of those who have gone on to graduate school, a higher proportion are working in areas related to psychology relative to those at

the baccalaureate level. Other differences between these groups pertain to participation in extra-curricular activities (i.e., individualized experiences such as independent study, honors thesis, B. S. program, internship, and the psychology club), overall rating of the psychology department, faculty involvement/enthusiasm, and preparation for graduate school. Those going on to pursue graduate training reported a higher level of participation in individualized experiences, felt better prepared for graduate school, rated the department slightly higher overall, and saw the faculty as more involved and enthusiastic about teaching.

As a department, we have always placed considerable emphasis on providing interested students with the opportunity to participate in specialized experiences outside the classroom (e.g., internships, independent study/research, Psi Chi, Psychology Club, etc. See Appendix A). We were especially interested in whether such participation was associated with satisfaction and other outcome data. Thus, alumni who participated in two or more such activities during their undergraduate training were compared to those who participated in one or more such activity. The differences were dramatic. Those alumni who participated more outside class activities rated their satisfaction significantly higher (t-test, $p < .05$) on every item (except the item that asked for their satisfaction with the college); were significantly more likely to have had graduate training, and even expressed a greater interest in receiving a departmental newsletter and being listed in our

proposed alumni directory.

Separate regression analyses revealed that four variables (faculty course/interest in students, availability of specialized opportunities, quality of extra-curricular activities, program contribution to personal growth and development) best predicted participation in individualized experiences, accounting for 22% of the variance.

Despite the inability to determine the causal chain among these data, taken together, they provide strong evidence that participation in specialized extracurricular activities that bring the student into close working contact with individual faculty and other motivated students are associated with high levels of satisfaction among graduates. These data parallel the consistent finding in the literature on student retention/attrition that personal contact or mentoring by a faculty member greatly enhances retention rates among students, including high-risk students (e.g., Astin, 1975). They reinforce our commitment to providing such opportunities to students and have, in fact, strengthened our efforts to expand such opportunity despite the rapid increase in the number of majors in psychology (currently more than 450 majors for 13 faculty).

In one attempt to respond to these issues we have revised our internship program to accommodate larger numbers via special arrangements with community settings and having one faculty member monitor all internships as part of their course load while immediate supervision of each student is still provided by individual faculty and community setting supervisors. We are

also encouraging faculty to involve students in "team" research projects and to offer more independent readings which carry only one credit and require less supervision/individualized contact but still provide such contact. If our resource base remains stable, as it has for several years, while the number of majors continues to grow we will need to develop even more creative ways of engaging individual students in their education. We remain committed to these efforts.

References

Astin, Alexander W. (1975). Preventing students from dropping out. San Francisco, CA: Jossey-Bass, Inc.

Astin, Alexander W. (1991). "The American freshmen: National norms for fall 1990." American Council on Education and University of California at Los Angeles. Reprinted in The Chronicle of Higher Education, 30 Jan.: A31.

Burke, Joseph C. (1992). Faculty involvement in undergraduate assessment: Assessing the right things in the right way, and at the right time. In Chen, James R., Seidel, Robert N., & Straight, H. Stephen (Eds.). Assessment at SUNY: Principles, processes, and case studies. September 1992, Appendix 1, pp. 16-18. Albany, NY: State University of New York.

Chen, James R., Seidel, Robert N., & Straight, H. Stephen (Eds.). (September, 1992). Assessment at SUNY: Principles, processes, and case studies. Albany, NY: State University of New York.

APPENDIX A

PSYCHOLOGY GRADUATES' QUESTIONNAIRE

Dear graduate of the SUCB Psychology Department,

The Psychology Department is attempting to make contact with our graduates. We would like to know the course our graduates' lives have taken, solicit feedback on your experiences that can help us to continue to improve our program, and let you know of the developments here at SUCB and in the Psychology Department. To help us accomplish this, would you please take a few minuets to complete the questionnaire that follows and return it in the enclosed envelope. Thank you.

1. What year did you graduate from SUCB? range = 1973-1993

2. What is your age? (optional) 21 yrs. - 50 yrs. old

3. What is your race/ethnicity? (optional)

	n	total n=204
a. American Indian/ Alaskan Native	0	
b. Asian or Pacific Islander	1	
c. Black/African American	5	
d. Hispanic	2	
e. White not of Hispanic Origin	186	
no response	10	

4. Based on your experiences, please rate the Psychology Program at SUCB on the dimensions listed below using the following scale:

1 poor 2 below average 3 average 4 good 5 excellent

$\bar{x}$	S.D.	
4.09	.84	a. Faculty interest/concern in helping students meet academic needs.
3.92	.82	b. Availability of required courses.
3.74	.86	c. Availability of desired courses.
4.29	.73	d. Quality of instruction.
4.06	1.01	e. Availability of faculty outside class.
3.80	1.29	f. Availability of opportunities for specialized academic experiences (i.e., independent study, internship, etc.)
4.20	.80	g. Academic standards of the department.
4.03	.91	h. Faculty involvement/enthusiasm.
3.43	.75	i. Student involvement/enthusiasm.
4.06	.91	j. Quality of extra-curricular activities offered within the department (i.e. Psychology Club, etc.)

5. Please indicate whether you have participated in any of the department programs listed below:

		% yes	n		% no	n	% blank	n
a. BS Program	Yes	22.5	46	No	76.0	155	1.5	3
b. Internship	Yes	16.2	33	No	82.4	168	1.5	3
c. Independent Study/Project	Yes	45.6	93	No	52.9	108	1.5	3
d. Volunteer Research Assistant	Yes	24.0	49	No	74.5	152	1.5	3
e. Psychology Club	Yes	30.9	63	No	67.6	138	1.5	3
f. PsiChi	Yes	29.9	61	No	68.6	140	1.5	3
g. Department Newsletter	Yes	3.9	8	No	94.6	193	1.5	3

h. Other? Please list: _____

_____

Please use the following scale to identify the response that most accurately reflects your reaction to each item.

1 poor — 2 below average — 3 average — 4 good — 5 excellent

$\bar{x}$	S.D.	
3.69	.74	My academic experience at SUCB outside of Psychology.
4.29	.79	The Psychology Program at SUCB.
4.13	.85	The Psychology Program's contribution to my personal growth and development.
4.31	1.38	The degree to which the Psychology Program prepares students for advanced academic studies.

Please use the following scale to identify the response that most accurately reflects your reaction to each item.

1 not recommend — 2 not sure — 3 recommend — 4 strongly recommend

$\bar{x}$	S.D.	
3.18	.83	Would you recommend SUCB to other potential students?
3.43	.92	Would you recommend the Psychology Program at SUCB to potential students?

12. While a student at SUCB, in what areas of Psychology do you wish more courses had been offered? (circle all appropriate responses)

a. Clinical/Counseling
b. Cognitive
c. Developmental/Aging
d. Experimental/Statistics
e. Health Psychology
f. Industrial/Organizational
g. Learning/Motivation
h. Neuropsychology/Physiological
i. Psychology and the Law (Forensic Psychology)
j. Social/Environmental
k. Internship
l. Independent study

13. What is the highest level of education you have completed?

n=	
87	a. BA
20	b. BS
15	c. MA
37	d. MS
10	e. MSW
4	f. MBA
10	g. Ph.D.
0	h. Psy.D.
4	i. JD
17	j. Other (please specify) MEd - 15, DDS-1, no response -1

14. Please specify the area in which you received your highest degree.

a. Psychology, Specialty Area _____
b. Counseling Specialty Area _____
c. Social Work, Specialty Area _____
d. Law, Specialty Area _____
e. Business, Specialty Area _____
f. Medicine, Specialty Area _____
g. Nursing, Specialty Area _____
h. Other _____

15. Are you currently enrolled in a graduate or professional program?

n=	
53	a. yes
151	b. no

16. If so, what is the degree you are seeking to earn?

a. MA
b. MS
c. MSW
d. MBA
e. Ph.D.
f. Psy.D.
g. JD
h. Other (please specify) _____

17. If enrolled in graduate study please specify the area of your program.

a. Psychology, Specialty Area _____
b. Social Work, Specialty Area _____
c. Law, Specialty Area _____
d. Business, Specialty Area _____
e. Medicine, Specialty Area _____
f. Other _____

18. Please indicate your current employment status.

n=
7 a. currently unemployed but seeking employment
8 b. currently unemployed by choice
110 c. currently employed in Psychology or a related field
74 d. currently employed in a job unrelated to Psychology
5 no response

19. Please identify your current job title and a brief description of your job duties.

Title: _____

Duties: _____

_____

_____

20. Would you be interested in receiving a Psychology Department Newsletter?

1 not interested	2 somewhat interested	3 interested	4 very interested	no response
n = 17	n = 20	n = 69	n = 88	n = 1

21. Would you like to be included in an Alumni Directory?

1 not interested	2 somewhat interested	3 interested	4 very interested	no response
n = 33	n = 43	n = 61	n = 60	n = 7

22. To update our records could you please provide the following information.

Name _____

Address (Home) _____
_____
_____

Telephone Number _____

Address (Work) _____
_____
_____

Telephone Number _____

23. Please add any additional information or comments that you believe could help strengthen the educational experience offered by the Psychology Department at SUCB.

Thank you for your cooperation in completing this questionnaire. If you have any questions, or would like to provide us with additional information, please do not hesitate to contact _____ at (716) 878-6215.

Cooperation In Operation

Examples of Successful Cooperative Lessons from Four Areas of Psychology

Susan K. Marell, Ph.D. and Libby Wyatt Ortiz, Ph.D.

St. Thomas Aquinas College, Rte 340, Sparkill, New York 10976

The 8th Annual Conference on
Undergraduate Teaching of Psychology:
Ideas and Innovations

March 1994
Ellenville, New York

Please request permission from the authors to reprint these materials

Cooperation in Operation: Examples of Successful Cooperative Learning Lessons from Four Areas of Psychology

Abstract

Cooperative learning offers many advantages when used as an adjunct to traditional lecture and classroom discussions. There are many articles that have already documented the value of cooperative learning at the college level, but leave the reader wondering how to apply it to one's own classroom. This workshop will provide both a theoretical base as well as practical hands-on experiences with cooperative learning. Participants will obtain a much better understanding of how to design and implement their own cooperative learning lessons.

Cooperation in Operation

Cooperative learning offers many advantages when used as an adjunct to traditional lecture and classroom discussions. Hands-on methods enable students to learn in an active way, thus enhancing their understanding and retention. Camaraderie, mutual support and positive self-esteem are all benefits, as students learn that they have something valuable to offer. Cooperative learning also addresses the needs of increasingly diverse student populations and encourages greater participation by women and minorities who have traditionally taken a back seat in the lecture classroom. Students frequently report that working together cooperatively with other students makes learning fun.

The research support for the advantages of cooperative learning is vast. Recently, attention has shifted from elementary and secondary classrooms to higher education. There are many articles that have already documented the value of cooperative learning at the college level, but leave the reader wondering how to apply it to one's own classroom.

The purposes of the proposed workshop are as follows:

1. *to outline the basic elements of effective group lessons*;
2. *to provide specific illustrations of cooperative learning lessons in four different areas of psychology (personality, experimental, statistics, and educational)*;
3. *to facilitate the design of model lessons by workshop participants.*

Participants will leave with:

1. *an annotated bibliography concerning cooperative learning*;

2. *a group lesson in their specific subject area*;

3. *hand-outs with skeleton plans for group learning structures applicable for all subject areas;*

4. *the experience of being participants in a group lesson themselves.*

The workshop will provide both a theoretical base as well as practical hands-on experiences with cooperative learning. Participants will obtain a much better understanding of how to design and implement their own cooperative learning lessons.

The basic elements of effective group lessons:

Slavin (1994) has suggested that in order for cooperative learning to be most effective, two conditions must be met: first, there must be some reward for groups that do well, and second "the success of the group must depend on the *individual* learning of each group member, not on a single group product" (p. 290). Beyond these considerations, we have found the following to be elements of successful collaborative lessons:

1. Provisions should be made for both individual and group accountability.
2. The group product should not be used for assessment for individuals.
3. Individuals should be assigned group roles.
4. Group roles must be understood by all group members.
5. Students should have the opportunity to participate in both randomly assigned groups and teacher assigned, mixed ability groups.
6. Clear directions for the assignment should be made before the groups separate.
7. All students must have an understanding of what to do when the task is finished, so that groups which finish early remain on-task.
8. The instructor must effectively monitor the groups, to ensure that individuals are playing their roles.
9. The instructor must retain the role of facilitator rather than participant.
10. Students should be instructed in problem solving techniques, and taught the characteristics of effective groups.
11. Groups must have an opportunity to share their products by reporting out to the larger class or to another group.
12. After groups report on their products, the instructor's role is to place their

products in a broader context of the course objectives.

13. There should be frequent opportunities for individual, written reflection.
14. Members should give feedback to each other about their participation.
15. Instructors should make themselves available to students to express concerns over long-term group projects.
16. Cooperative learning activities should be balanced by other modes of instruction within a course.

Benefits of cooperative learning

Before discussing collaborative techniques for college classrooms, some of its benefits, for both the instructor and the students, will be reviewed. Cooperative learning methods have been shown to be particularly beneficial for promoting harmony in culturally diverse classrooms (Slavin, 1994). Working together toward a common goal breaks down divisions within classrooms. In addition, collaborative methods appear to be best suited for some women and some ethnic minorities who naturally form cooperative rather than competitive groups. Thus, the classroom becomes a place where participation is encouraged from all members of the classroom community.

As in other forms of active learning, cooperative learning experiences facilitate long-term memory of course material. Students are required to process and re-process content, as they apply what they have heard and read to form a product, discuss ideas, or solve a problem. The rehearsal of information encourages retention, while rephrasing of concepts for others in the group, leads to greater understanding and assimilation. Instructors find that material that was covered in this manner stands out in students' minds as meaningful rather than unrelated knowledge.

Students find well planned group activities to be fun, and a welcome change of pace from passive learning experiences. College students report that the period "goes so much more quickly" when they work in groups. Commuter students who frequently take a long time to build relationships with classmates, become acquainted with their group members easily and feel less isolated. Motivation is not a problem when group members know that others are depending upon their preparation.

Students who are reluctant to do group work are those whose preferred learning mode is individual. Some students have been disappointed by poorly planned group projects in the past, in which their desire to achieve was thwarted by an irresponsible group member. Instructors can be alert to these students' needs, and reassure them that their individual efforts *within* the group are valued. Assigning individual written reflections to use for individual assessments is invaluable in this regard. We have heard from many students who have been pleasantly surprised at the way groups can work when expectations for accountability are made clear. Helping strong students realize that they become even more familiar with the material through explaining it to others, helps them perceive "what is in it for them."

Less academically prepared students benefit from explanations given to them by their peers. They perceive them as less threatening, since they are not given by someone who is in a position to grade their efforts or evaluate their ignorance. Student to student explanations are given in fresh ways, whereas the instructor may teach a concept the same way over and over, not seeing the gaps in his/her own instruction.

The benefits of cooperative learning for the instructor derive from the students' increased motivation. When instructors see increased attention, attendance, and positive course evaluations, the advantages of active lessons are obvious. Because the lessons are dynamic, new approaches can be attempted all the time. Faculty at our college share ideas across disciplines, refining structures and sharing results after modifications. The affective tone within the classroom, the sense of joint effort, rather than of one-way communication, builds the cooperative rather than competitive or individualistic classroom culture so necessary for relaxed, non-threatening student-

teacher relationships.

Educational Psychology

Strategy I: The First Class in Educational Psychology

Students in an introductory course in educational psychology have benefitted from a variety of cooperative assignments. Indeed, the first session of class is comprised of several experiences designed to create a collegial atmosphere. Initially, students participate in a "getting acquainted" exercise, in which they must circulate within the class to answer a series of questions, such as "find someone who wants to teach kindergarten," "find another student who listens to the same radio station that you do," or "find another person who speaks a language other than English." The instructor circulates during this time, as well. The opportunity to learn each others names and to deviate from the standard, "let's go over the syllabus" ritual energizes the classroom.

Once rapport has been established, the students are asked to form groups. I have found that it is most helpful to divide the students by the age level they hope to teach. Once that is accomplished, the assignment is given to "brain storm" the characteristics of effective teachers. Students then share their descriptions with the whole class. Typically, the results cluster into three factors: nurturance, effectiveness in communication, and knowledge of content area. We discuss these three factors, and our goal in the course to improve their success in the second factor through their knowledge of pedagogy. Finally students are asked to work independently to write a

reflective paragraph, comparing themselves to the qualities they have described.

The class thus fits a pattern I have found most successful in creating an interactive classroom: opportunity for shared observations, input from the instructor to place the observations in a meaningful context, and finally, the opportunity for individual reflection. I have been able to structure a variety of classes in the same manner, including those on motivation, on tracking, on attitudes toward disabilities, and on experimental design.

Strategy II: Culminating Project in Educational Psychology

The educational psychology course closes with the presentation of model lessons by the student groups. The groups are formed during the first week, meet throughout the semester, and finally present a lesson to the whole class on a topic of their choice. I have enjoyed lessons from a wealth of areas: the history of stained glass, the use of geoboards to teach mathematical concepts, the five senses, CPR, an introduction to the culture of Spain. Students must include the elements of a complete lesson as outlined in their textbook and must allow for each person in their group to present for at least five minutes. All students receive opinion from their fellow students on their presentation. Peer opinion seems particularly important to students at all levels. They have become used to receiving critiques from instructors, but have little experience hearing in a structured way from fellow students. A standard form with opportunities to comment on eye contact, voice clarity, enthusiasm, organization,

appropriateness of instruction, and creativity is used for every lesson. Students are asked to give equal attention to strengths and development needs. I critique the lesson to point out features we have discussed in class.

A common problem in collaborative learning strategies is achieving individual accountability. I have found that this is especially true for undergraduate students who vary in motivation and ability more than their graduate counterparts. To achieve this critical aspect of lesson effectiveness, all students must submit a reflection paper commenting on their group lesson. They are asked to comment on the success of their lesson in meeting its objectives, areas that could have been improved, and on the experience of being a group member. These papers provide students with the opportunity to voice dissatisfaction with other students' performance, and to make the instructor aware of the extent of their own efforts. Interestingly, the students who have been criticized by their fellow group members for their lack of participation are usually quick to admit it themselves.

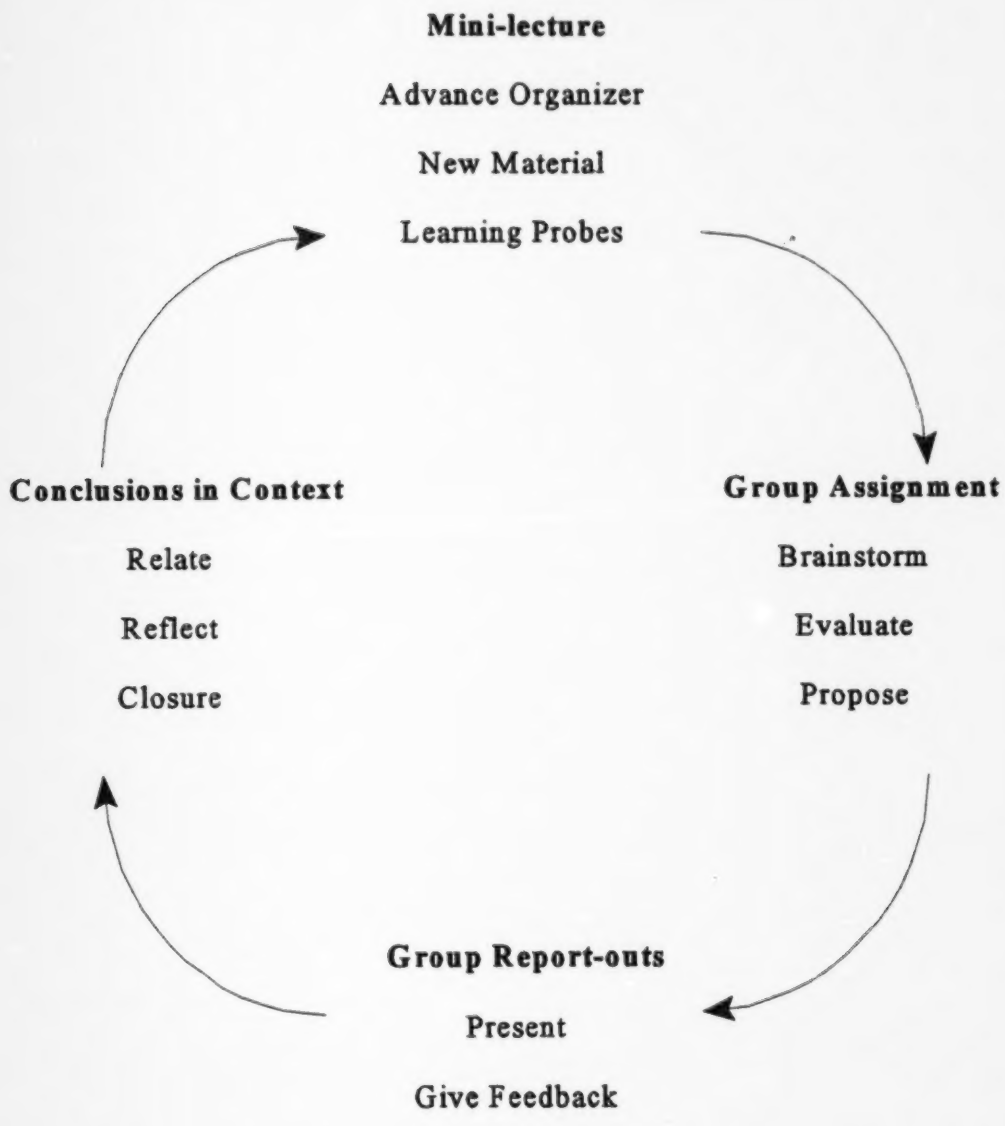
Students have found the entire experience of the group lesson to be the most meaningful part of the course, and have said "it puts it all together" for them. Concepts such as "anticipatory set," "learning probe," "independent practice," "formative evaluation" -- all are tied to personal experience, and are thus comprehended and retained. Graduate students in our certificate of advanced studies

course have commented that it was the experience of being in a cooperative learning group that made them bond together as a class, forming a support network that served them well over the two to three semesters of their graduate studies. Lessons created in this manner became the stimulus for model lessons used in demonstrations for prospective employment. Undergraduates most often comment that the experience gave them the understanding of all that was required to design and carry out an effective lesson, and that the support of being together made the task manageable.

Many instructors and students have voiced a reluctance for group work because of the difficulty assigning grades. There has been considerable discussion about the ethics of giving a single grade for a group product. I have found that the best solution is to use group work for instruction, separate from assessment. Participation in group assignments can contribute to a more global classroom participation grade, while written or oral reflections can be used for individual assessment. Clarifying this distinction early in the semester makes for much more cooperation from all students, including those super-motivated returning students who when grouped with less motivated frequently younger classmates, feel frustrated and resentful. Discussions of the reality of collaborative problem solving in the work place of the schools help these students see the relevance of developing group process skills before they enter their profession.

PARADIGM FOR INTERACTIVE LESSON

Interactive Learning Loop



APPLYING COOPERATIVE LEARNING TO EXPERIMENTAL PSYCHOLOGY

Students in Experimental Psychology often have great difficulty grasping the concepts and particularly identifying key features of research articles. After having been taught some of these concepts it is useful to reinforce them by using actual research articles. Students are formed into groups of four students and assigned a specific research article (The first time or two, it is useful to have the entire class work on the same article; later on, students can get more exposure to different areas of research if each group works on a different article). Each group is given a list of questions to answer (e.g. Identify the independent and dependent variables and tell how each was operationalized; What was the hypothesis of the study?; Briefly describe what method was used.; Was this an experimental or correlational study?; What were the results?; What are the implications of the study?) Each group must write its answers to the above questions and each group member is asked to answer one of the questions for the class (Instructor can start with one student and go clockwise around the group). Groups should be heterogeneous (assigned by the instructor). Each of the articles chosen can be tailored to a particular concept (e.g. experimental vs. correlational research, reliability, validity, etc.), thus coordinating with a particular chapter in the text.

This technique has been used with great success in several semesters of teaching Experimental Psychology. This hands on approach tremendously enhances the student's understanding of the concepts taught in the course, and makes the course much more enjoyable and less threatening.

Students in my Experimental Psychology courses are also required to design their own original experiment (an experimental design is required). Students brainstorm initial research ideas in groups and meet several times over the course of the semester to refine their research proposals. The same group composition can be used as for the above exercise, and student groups have often met on their own outside of class time to study. This has lead to a high level of camaraderie in my experimental psychology classes, as students feel the support and help of their classmates for a course and project which appeared overwhelming to them at first. The research proposals must be individually written, though group members can also offer suggestions to their classmates on the written papers before they are handed in. The papers have been of an exceptionally high quality, and student feedback of the cooperative learning exercises has been extremely positive.

COOPERATIVE LEARNING APPLIED TO PERSONALITY THEORIES: THREE EXAMPLES

1. Case Study: Having learned the theories, students are eager to apply them. By using real life examples of people who have been extensively interviewed (White, R.W., Riggs, M.M., and Gilbert, D.C., Case Workbook in Personality), students can get together in groups and analyze in depth one of the four cases presented in the book. Students are randomly assigned to their case and must present the case to the class. Students are to include social and cultural background, family environment, social development and the basic personality characteristics derived from reading the interview. Additionally, students must work together to answer much more in-depth questions; they may either use those created by the authors at the end of each case, or the group may design its own questions to be cleared by the professor. Group size of four or five work best for this example. This has produced wonderful results in terms of students having the opportunity to analyze a real life case and to apply their knowledge about the various personality theories. Feedback from students has been extraordinarily positive, with many students indicating that the case made the theories come to life for them, and gave them a much better understanding and fuller appreciation of the various approaches to the study of personality.

2. Particularly when teaching Freudian theory (which is usually the first theory covered in Personality Theories), students often have trouble relating Freudian

concepts to current psychological theories or ways of thinking. After students have read the chapter in the text on Freudian theory, I divide them into groups of four or five students and have them generate a list of the components of Freudian theory that are fairly widely accepted today (e.g. the idea of the unconscious or unconscious motivation; Freudian slips, dreams having meaning, early childhood experiences affect later personality development, etc.) When students do this, they not only get a better grasp of the theory itself, but how many of its components are still held widely as accepted notions of personality development.

3. After learning about all the various defense mechanisms and hearing at least one example of each, students get into groups to try to generate at least two examples of each defense mechanism. At the end of the class, each defense mechanism is taken one at a time, and the examples are read from the lists of each group. Group members take turns reading from the list. This gives everyone an active role in thinking about the various defense mechanisms, generating examples of them, and sharing those examples with the class. By the end of class, students should have heard approximately ten to twenty examples of each defense mechanism, thus tremendously enhancing understanding. Lists can be photocopied for the class or put on overheads.

APPLYING COOPERATIVE LEARNING TO STATISTICS

In statistics, cooperative learning can be used to help alleviate anxiety and to reinforce skills through practice. Students are taught a lesson (t-tests, for example), and are given two or three examples by the instructor. After this, they are broken into heterogeneous groups assigned by the instructor to work on additional problems. By doing this, weaker students have the opportunity to hear the material explained in a different manner by a peer. They also begin to work on problems in class, thus alleviating the difficulty many students have in just getting started. Stronger students benefit from enhanced understanding resulting from explaining or teaching the material to others. All students benefit from an increased sense of community and feeling that they have someone to call when they do not understand the work. In many classes, students have decided on their own to meet with their study groups outside of class, particularly prior to exams. The statistics classes in which this technique has been used for even a small portion of class time have reported decreased anxiety about the course. Some students even report that they liked statistics! These classes have also performed better as a whole and form a more tightly-knit group when they move on to Experimental Psychology.

ANNOTATED BIBLIOGRAPHY
COLLABORATIVE LEARNING IN THE COLLEGE CLASSROOM

Susan K. Marell and Libby Wyatt Ortiz
St. Thomas Aquinas College
Sparkill, New York

1. Cooper, J., Prescott, S., Cook, L., Smith, L., Mueck, R. & Cueso, J. (1990). Cooperative learning and college instruction. Dominguez Hills, CA: The California State University Foundation.

Book features the rationale for cooperative learning and a wide variety of ideas for getting started. The authors also address many common questions and concerns regarding cooperative learning. Contains an extensive bibliography. An excellent book for those new to cooperative learning.

2. Goodsell, A., Maher, M. & Tinto, V. (1992) Collaborative learning: A sourcebook for higher education. University Park, PA: The National Center on Postsecondary Teaching, Learning and Assessment.

An extremely comprehensive resource book containing sections on describing collaborative learning, the implementation of collaborative learning and assessing the effectiveness of collaborative learning. Each section contains an extensive annotated bibliography as well as a general bibliography. Book also contains a discipline-specific biography as well as information about collaborative learning networks.

3. Slavin, R. (1990) Cooperative learning: Theory, research and practice. Englewood Cliffs, NJ: Prentice Hall, Inc.

Book contains extensive background on the theory behind cooperative learning as well as several structures for cooperative learning lessons. Extensive research presented on benefits of cooperative learning both on achievement and in other domains.

4. Cooperative Learning and College Teaching. A Newsletter published by California State University, Dominguez Hills (Write to Dr. Jim Cooper, HFA-B-316, CSU Dominguez Hills, 1000 E. Victoria St., Carson, CA 90747).

This is an excellent newsletter published under a FIPSE grant by faculty members at CSU who are actively engaged in Cooperative Learning. An excellent source of information.

Knowing Thyself: Teaching a Course on Social Psychological Perspectives on Self-Reflection

Dana S. Dunn

Moravian College

8th Annual Conference on Undergraduate Teaching of Psychology: Ideas & Innovations

March 16 - 18, 1994

Ellenville, NY

Abstract

Introspection is usually construed as an error free exercise where self-reflection should lead to self-knowledge. I teach a course that opens self-reflection and self-knowledge up to doubt, and in doing so, I review recent research in social psychology, as well as related work from psychoanalysis and personality. The course has the advantage of organizing a collection of seemingly separate research topics into a coherent framework emphasizing the difficulty in accurately knowing ourselves.

Knowing Thyself: Teaching a Course on Social Psychological Perspectives on Self-Reflection

Self-reflection and self-knowledge are uniquely human characteristics. These private activities are usually treated as error-free exercises that allow us to really know ourselves and to gain some insight into the origins of our feelings, beliefs, and actions. I teach a course, however, that opens the Socratic dictum, "Know thyself," to some doubt and skepticism. Though introspection may be a desirable and even satisfying activity, it may not shed as much light on knowledge about the self as many of us, notably our students, suppose.

Nisbett and Wilson's (1977) critical review of people's inability to provide accurate self-reports about their mental states turned the tide on research supporting introspective awareness (cf., Ericsson & Simon, 1984). In the ensuing period, social psychologists have empirically demonstrated the limits of what we can know about the self or, in the language of contemporary social cognition, even access. My course, titled "Self-Reflection and Self-Knowledge," examines historical as well as contemporary evidence for the efficacy (or lack thereof) of self-reflection and self-knowledge, highlighting material from social psychology but also utilizing relevant ideas from psychoanalysis and personality. Below I present the three perspectives on self-reflection covered in the class (representative citations are also provided), beginning with the issue of unconscious processes in self-understanding.

Three Perspectives on Self-Reflection

Unconscious Influences: Psychoanalysis

Is it possible that humans are largely unaware of the psychological processes that drive their emotional states and behavior? As we know, Freud and his followers--past and present--relied on this assumption. Unconscious influences in self-reflection and knowledge

are the focus of the section of the course devoted to study of issues from psychoanalysis. Students read a contemporary and richly detailed account of the therapeutic experience (Malcolm, 1982), as well as a shorter account of Freud's dream theory, On Dreams (Freud, 1901/1980). Briefly, Freud argued that dreams were the guide posts on the road toward understanding the unconscious. By carefully analyzing the manifest content of dreams, one could gain knowledge of the latent origins of one's own psychology and its problems. Students are invited to critically evaluate the possibility of unconscious motivations and to explore the meaning, if any, behind their dreams.

Dream analysis project. The first project students complete for the course is a dream analysis exercise (see Appendix for a copy of the handout and instructions). At the start of the semester, students are instructed to begin keeping a dream diary. Following Freud's own suggestions, upon waking from a dream, students record precisely what they remember about their dreams in as much detail as possible (keeping in mind Freud's warning about avoiding altering the recalled material by trying to make it fit together too neatly).

After several dreams are recorded, the students select one for the exercise and, following the technique described in On Dreams, begin by dividing the dream into small parts. In contrast to traditional methodology, the students "free associate" to each part of the dream in writing. Once the free association is completed, the written materials are evaluated by the students for any discernable themes or patterns. In particular, students search for evidence that the dream expresses an unconscious wish. The students are then asked to evaluate the self-analysis posed by dream interpretation, and then to consider whether such an exercise is a useful form of self-reflection.

Social Cognition and Self-Understanding

In the second unit, I examine several areas of recent research in social psychology that illustrate the paradoxical side of self-reflection; that is, the effort exerted toward self-understanding is often inversely related to the results obtained. Although these areas can illustrate a lack of self-insight, some do demonstrate self-enhancing properties, as shown by the literatures on self-serving biases (e.g., Dunn, 1989; Nisbett & Ross, 1980) and positive illusions (Taylor & Brown, 1989). Others--such as the recent research on introspection and attitude-behavior consistency (Wilson, Dunn, Kraft, & Lisle, 1989; Wilson & Schooler, 1991; but see Hixon & Swann, 1993)--illustrate how attempts to carefully analyze the reasons for our feelings or decisions can actually be disruptive to achieving those ends.

I also present instances where people actively engage in behaviors that are self-defeating in order to preserve their sense of self-esteem. This self-handicapping research (Arkin & Baumgardner, 1985) is often easily understood by students, particularly when examples such as excessive alcohol consumption the night before an important exam are considered. Students recognize that the latter strategy may be a means to mask poor performance for a stable and, therefore, threatening reason--lack of ability.

Unwanted thoughts, their origins and effects, are also reviewed in this section of the course. On the positive side, the beneficial effects of disclosing unwanted thoughts (e.g., regarding traumas) in writing readily engages students (Pennebaker, 1989). Students are also intrigued by the recent analyses of why thought suppression--whether the thought is mundane in character or emotionally charged--can be problematic (Wegner, Schneider, Carter, & White, 1987).

The final section of this unit considers how well we do at making a specific sort of

self-judgment: Identifying the predictors of our moods (Wilson, Laser, & Stone, 1982). Two related themes emerge from this issue. First, as social perceivers, we frequently rely upon naive, shared theories rather than appropriate data when making judgments about the self. Second, as self-reflective beings, we are usually no more accurate than observers who lack introspective access to the supposed mental states that influence our behavior. Whether we are the actor or the observer, then, we tend to reach the same, often inaccurate conclusions about the self.

Mood predictor exercise. Following Wilson, Laser, & Stone (1982), students participate in an exercise that asks them to determine what personal (e.g., health status, exercise) or situational factors (e.g., weather, food) influence their moods. To do so, students complete a daily mood sheet (a copy of this measure, as well as the exercise directions, appear in the Appendix) that asks them to rate their overall mood on a given day and to then answer a series a questions pertaining to particular personal or situational factors they encountered that day. Thus, for example, does the fact that it is Friday enhance people's moods? In contrast, does foul weather put people in a bad mood?

Students also have the opportunity to keep track of their own variables of interest in this exercise. At the end of the rating period (usually two weeks or thereabouts), students correlate their daily mood ratings with each of the factors they tracked. The resulting correlations indicate the strength of association between subjective mood and the more objective factors. Prior to completing these calculations, however, subjects also rate the degree to which the objective factors are perceived to be influential in altering their moods. These subjective ratings are then correlated with the mood-factor correlations, resulting in an accuracy score.

This accuracy score provides the students with an empirical indicator of how well calibrated they are regarding what factors do (or do not) influence how they feel on a daily basis. It also allows them to examine the efficacy of idiosyncratic versus shared theories of what affects our moods, as well as to consider why we so often persist in believing unreliable theories. Replicating the results of the Wilson, Laser, & Stone (1982), many students are surprised to learn that their skills at judging what factors affect their moods are quite modest (rs typically range from .20 -.40).

Personality: Traits and Time

The review of personality and self-knowledge emphasizes the classic problem of demonstrating cross-situational consistency in behavior (Mischel, 1965, chapters 1 and 2; Ross & Nisbett, 1991, chapter 4). Specific individual difference variables that people may not realize regulate their personal efficacy as well as health status, such as dispositional optimism (Scheier & Carver, 1985), self-complexity (Linville, 1987), and explanatory or attributional style (Peterson, Seligman, & Vaillant, 1988), are also considered. A longitudinal perspective on personality, which explores the difficulty in predicting the use of psychological defense mechanisms, is introduced by a detailed review of the Grant Study of Adult Development presented in the now classic Adaptation to Life (Vaillant, 1978).

Personality trait exercise. To illustrate the often divergent conclusions made by actors and observers regarding perceived personality traits, the third exercise involves having students rate themselves on a simple personality measure comprised of three subscales: Sociability, activity, and emotionality. Beyond the self-ratings, students also ask peers and/or family members to rate their personality using a modified scale (i.e., observers rate the personality of actors). The instructions, inventory, and scoring key are provided in the

Appendix.

This third exercise allows students to consider some of the problems associated with self-report inventories, such as social desirability concerns or response bias if the purpose of the measure is guessed. The use of multiple raters affords students the opportunity to explore how frequently their behavior is governed by situational constraints. Finally, students can revisit the issue of accuracy by considering the role traits play in self-knowledge.

Course Mechanics

Beyond the three written exercises, students can keep a journal of their reactions to the readings, the exercises, and class discussions. I usually collect journals twice, once at mid-term and again prior to the final exam.

In terms of testing procedures, I have tried two forms of final examinations that are essay based. I have given students a take-home exam with ten or so essay questions on it, and then had them select any two to answer. A three, double-spaced and typed page limit is imposed on each question; I allow a fourth page for references. Alternatively, I have given the traditional in-class blue book essay exam, though I usually pass out a list of ten or so essay questions in advance. I then randomly choose two questions from the handout at the start of the exam period. Both alternatives work well, thought I tend to favor the former procedure because it gives students a last chance to carefully reflect on how well they know themselves in light of our readings and discussions.

In order to simplify the students' lives a bit, I have put together a bound reader of the course readings in cooperation with our college bookstore. The advantage for students is the effective savings of time spent copying readings from the reserve section of the library. At

the same time they purchase the few paperback books assigned in the course, they can also pick up an organized packet of the course readings. As professor, I reap the practical benefit of knowing that students cannot make the argument that any given reserve reading was not available to be read in time for class.

I want to conclude this brief paper by noting that one of the most enriching aspects of this course is the quality and scope of the class discussions. I have found that grouping these sets of readings in order to address the issue of self-reflection has made them all the more accessible and interesting to the students. They are engaged by the fact that they can apply the materials to their own experiences and, I think, to some degree feel empowered to argue or agree with the research as a result. In most psychology courses, students are used to receiving the material "as is"--here, they have an opportunity to reflect on its relevance to their lives and what they know (or do not know) about themselves.

References

Arkin, R. M., & Baumgardner, A. H. (1985). Self-handicapping. In J. Harvey & G. Weary (Eds.), Attribution: Basic issues and applications (pp. 169-202). New York: Academic.

Dunn, D. S. (1989). Demonstrating a self-serving bias. Teaching of Psychology, 16, 21-22.

Ericsson, K. A., & Simon, H. A. (1984). Protocol analysis: Verbal reports as data. Cambridge: MIT Press.

Freud, S. (1980). On dreams. (J. Strachey, Ed. and Trans.). New York: Norton. (Original work published 1901)

Hixon, J. G., & Swann, W. B. (1993). When does introspection bear fruit? Self-reflection, self-insight, and interpersonal choices. Journal of Personality and Social Psychology, 64, 35-43.

Linville, P. W. (1987). Self-complexity as a cognitive buffer against stress and illness. Journal of Personality and Social Psychology, 52, 663-676.

Malcolm, J. (1982). Psychoanalysis: The impossible profession. New York: Vintage.

Mischel, W. (1968). Personality and assessment. New York: Wiley.

Nisbett, R. E., & Ross, L. (1980). Human inference: Strategies and shortcomings of social judgment. Englewood Cliffs, NJ: Prentice Hall.

Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. Psychological Review, 84, 231-259.

Pennebaker, J. W. (1989). Confession, inhibition, and disease. In L. Berkowitz (Ed.), Advances in experimental social psychology, Vol. 22 (pp. 211-244). San Diego, CA: Academic.

Peterson, C., Seligman, M. E. P., & Vaillant, G. E. (1988). Pessimistic explanatory style is a risk factor for physical illness: A thirty-five year longitudinal study. Journal of Personality and Social Psychology, 55, 23-27.

Ross, L., & Nisbett, R. E. (1991). The person and the situation. New York: McGraw-Hill.

Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. Health Psychology, 4, 219-247.

Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. Psychological Bulletin, 103, 193-210.

Vaillant, G. E. (1978). Adaptation to life. New York: Little, Brown.

Wegner, D. M., Schneider, D. J., Carter, S. R., & White, T. L. (1987). Paradoxical effects of thought suppression. Journal of Personality and Social Psychology, 53, 5-13.

Wilson, T. D., Dunn, D. S., Kraft, D., & Lisle, D. J. (1989). Introspection, attitude change, and attitude-behavior consistency: The disruptive effects of explaining why we feel the way we do. In L. Berkowitz (Ed.), Advances in experimental social psychology, Vol. 22 (pp. 287-343). San Diego, CA: Academic.

Wilson, T. D., Laser, P. S., & Stone, J. I. (1982). Judging the predictors of one's own mood: Accuracy and the use of shared theories. Journal of Experimental Social Psychology, 18, 537-556.

Wilson, T. D., & Schooler, J. W. (1991). Thinking too much: Introspection can reduce the quality of preferences and decisions. Journal of Personality and Social Psychology, 60, 181-192.

Author Notes

This presentation was funded by the Moravian College Faculty Development and Research Committee. The exercises presented here were originally developed by Timothy D. Wilson (University of Virginia).

Correspondence concerning this presentation should be sent to Dana S. Dunn, Department of Psychology, Moravian College, 1200 Main Street, Bethlehem, PA 18018-6650 or via e-mail: dunn@moravian.edu.

Appendix

Dream Analysis: Project One

1. Start a dream diary immediately. Feel free, for example, to use your journal to record your dreams. When you wake up in the morning, write down as much as you can remember about each of your dreams.

2. Choose one of these dreams to analyze for your class project.

3. Don't try to interpret it right away. Divide the dream into small parts (following Freud's technique in On Dreams) and free associate to each one. Do this in writing--it will be part of what you hand in later. Bear in mind that free associating is not particularly easy to do and that it requires some practice. Write down whatever comes to mind, no matter how silly, irrelevant (or irreverent), bizarre, or mundane your thoughts seem to be. Be sure to associate to all parts of the dream. As Freud notes in The Interpretation of dreams, it is best to conduct your analysis over several days, not at one sitting.

4. After you association is complete, interpret the dream as best you can. What does it mean? Are there several simultaneous interpretations, as Freud suggests that there usually are? Just how does the dream express an unconscious wish? Consider how your analysis relates to the reading whenever possible.

5. Please type the description of your dream as well as interpretation. After interpreting the dream, answer the questions below (and type them as well). You need not type up your free associations, though you should attach them to the typed portion of your project. Your finished dream project is due in class on **Monday, June 14th.**

A. What did you learn about yourself from this exercise? Why?

B. According to psychoanalytic theory and dream interpretation, what are some of the problems with self-analysis? Did you encounter any of these problems? If so, which ones--please discuss them.

C. Using your dream analysis as evidence, evaluate Freud's theory of dreams. Do the results of your own analysis confirm or disconfirm Freud's ideas? Why?

D. Is dream interpretation a useful form of self-reflection?

Note: Since it is possible that your free associations and dream interpretations may be of a personal nature, rest assured that your report will be kept strictly confidential. Only I will read it--and it will be returned to you.

Dunn
Self-Reflection & Self-Knowledge
Summer I 1993

Analyzing the Predictors of Your Mood: Project Two

1. Complete the attached questionnaire before going on.

2. Compute the correlation coefficient between your daily mood ratings (Question 1 on the daily questionnaire) and each of the factors which might predict your mood (i.e., weather, health, etc.). Here is how to do it for the correlation between your mood ratings of the weather, for example.

   X = your daily mood ratings
   Y = your daily ratings of the weather
   N = the number of days you filled out the questionnaire
   ΣXY = multiply X times Y on each day, then sum these products
   ΣX = the sum of all the X ratings
   ΣY = the sum of all the Y ratings

   ΣX^2 = square the X ratings on each day, then sum these squares

   ΣY^2 = same as for ΣX^2

   $(\Sigma X)^2$ = sum all of the X ratings, then square this sum

   $(\Sigma Y)^2$ = sum all of the y ratings, then square this sum

   The correlation, r, between X and Y =

$$\frac{N\Sigma XY - \Sigma X \Sigma Y}{\sqrt{[N\Sigma X^2 - (\Sigma X)^2]\,[N\Sigma Y^2 - (\Sigma Y)^2]}}$$

Note: For the days of the week, such as Monday, Y = 1 when it is Monday and Y = 0 when it is not a Monday.

3. You should end up with a correlation between your daily mood ratings and each of the 14 predictor variables listed in column 1 of the attached worksheet. Fill in these correlations in column 2 of the worksheet.

4. In column 3 of the worksheet, fill in your estimates of how much each variable predicted your mood (from Questionnaire 2).

5. Compute the correlation between columns 2 and 3 of the worksheet. This is your accuracy score. If it is between .50 and 1.00 your are pretty accurate at knowing how each of the variables predicts your mood. If it is less than .50, either you are fairly inaccurate, you made some computational errors, or there are problems with these procedures (such as there was not enough variance in your mood during the time you filled out the daily questionnaires).

6. Hand in your worksheet and the answers to these two questions:

   A. How much did you learn about yourself from this exercise?

   B. Evaluate the Wilson, Laser, and Stone article. Based on your experiences with this project, how valid are the conclusions in this article? Refer to the readings, be specific and critical.

Questionnaire 2

The following questions ask you to rate the relationship between several factors and your mood during the time you filled out the daily questionnaires. Each question asks whether there was a positive relationship between the factor (such as the weather) and your mood, a negative relationship, or no relationship. A positive relationship would exist if when the factor was given a high rating (such as the weather) your mood tended to be high and when the factor was given a low rating your mood tended to be low. A negative relationship would exist if when the factor was given a high rating your mood tended to be low, and when the factor was given a low rating your mood tended to be high. No relationship would exist if the factor and mood were unrelated, i.e., if your mood was no higher or lower when the factor was high than when it was low.

Rate each of the factors on the following scale:

-3	-2	-1	0	+1	+2	+3
Strong Negative Relationship	Moderate Negative Relationship	Slight Negative Relationship	No Relationship	Slight Positive Relationship	Moderate Positive Relationship	Strong Positive Relationship

1. How was your daily mood related to whether or not it was Monday? _____
   (negative relationship = mood tends to be lower on Mondays than on other days; positive relationship = mood tends to be higher on Mondays than on other days)
2. How was your daily mood related to whether or not it was Tuesday? _____
3. How was your daily mood related to whether or not it was Wednesday? _____
4. How was your daily mood related to whether or not it was Thursday? _____
5. How was your daily mood related to whether or not it was Friday? _____
6. How was your daily mood related to whether or not it was Saturday? _____
7. How was your daily mood related to whether or not it was Sunday? _____
8. How was your daily mood related to the weather? _____
9. How was your daily mood related to your physical health? _____

BEST COPY AVAILABLE

10. How was your daily mood related to your relationships with friends of the opposite sex? _____

11. How was your daily mood related to the food you ate? _____

12. How was your daily mood related to your workload? _____

13. How was your daily mood related to the amount of physical exercise you got? _____

14. How was your daily mood related to the amount of sleep you got the night before? _____

15. Other _____

Transfer your ratings to the third column of the worksheet

WORKSHEET

(1) Predictor Variable	(2) Correlation Between Mood Ratings and this Variable (Should be Between -1 and +1)	(3) Subjective Rating of this Variable (from Questionnaire 2: should be between -3 and +3)
Monday	_____	_____
Tuesday	_____	_____
Wednesday	_____	_____
Thursday	_____	_____
Friday	_____	_____
Saturday	_____	_____
Sunday	_____	_____
Weather	_____	_____
Health	_____	_____
Relationships	_____	_____
Food	_____	_____
Workload	_____	_____
Exercise	_____	_____
Sleep	_____	_____
Other	_____	_____

Correlation between columns 2 and 3: _____

Number of days filled out daily questionnaires _____

BEST COPY AVAILABLE

Dunn
Self-Reflection & Self-Knowledge
Summer I 1993

Daily Ratings of Mood

Answer the following set of questions at the same time each day. Complete one questionnaire daily. You should complete at least seven (i.e., one week) of these questionnaires. If you miss a day, do not try to remember how you felt. Just skip that day until the next week.

1. What day of the week was today (e.g., Monday)? _____

2. How would you describe your overall mood today?

   Very Bad Very Good

   1 2 3 4 5 6 7

3. How would you rate the weather today?

   Unpleasant Pleasant

   1 2 3 4 5 6 7

4. How would you rate your physical health?

   Very Bad Very Good

   1 2 3 4 5 6 7

5. How would you rate your relationship with your romantic partner/spouse/friends today?

   Very Bad Very Good

   1 2 3 4 5 6 7

6. How was the food you ate today?

   Very Bad Very Good

   1 2 3 4 5 6 7

BEST COPY AVAILABLE

7. How much course work did you have today?

Very Little Very Much

1 2 3 4 5 6 7

8. How much physical exercise did you get today?

Very Little Very Much

1 2 3 4 5 6 7

9. How many hours of sleep did you get last night? _____

10. Other:

1 2 3 4 5 6 7

Dunn
Self-Reflection & Self-Knowledge
Summer I 1993

Measuring Personality Traits: Project Three

1. Before you do anything else, complete the attached personality inventory.

2. Attached you will find a form of the same inventory for you to give to several of your friends who know you reasonably well. (Please don't ask anyone from this class to fill one out.) Ask your friends to rate your personality using the attached form. If this proves to be embarrassing for them, have them make the ratings anonymously.

3. Instructions for scoring the test are also attached. Score your self-ratings as well as your friends' ratings of your personality.

4. Hand in your scores on the three subscales, your friends' scores, and then answer the following three questions.

   a) Use your ratings to illustrate some of the problems with self-report inventories. Did you feel that you knew what the questions were "getting at?" Did you guessing influence your answers? How would you improve the inventory?

   b) How similar were the ratings of your different friends? Put another way, did they all rate you in a similar fashion? Why do you think they rated you similarly or differently? Do they all see you in the same situations or in different ones? What impact do situations have on your behavior?

   c) Compare the ratings your friends made with your own self-ratings. Do your friends see your personality the same way that your do? Why or why not? Who was most accurate? How could you tell who was more accurate? Be specific.

Scoring the Inventory

1. Bear in mind that the term "inventory," unlike "test," means that there are no right or wrong answers.

2. First, items 2, 4, 5 and 10 should be reversed. That is, change a rating of "5" to a "1", "4" to a "2," "2" to a "4," and "1" to a "5." A rating of "3" remains unchanged.

3. Sum the ratings of items 1-5, 6-10, and 11-15. Items 1-5 supposedly pertain to sociability, 6-10 to activity level, and 11-15 to emotionality. Listed below are ranges of scores on these three subscales found in 1975 by Willerman at the University of Texas. He reports that 60% of the Texas students fell within these ranges, and adds that "if your score falls below or above these ranges, you may regard yourself as exceptionally high or low [in that disposition]" (p.35).

	Males' Range	Females' Range
Sociability	13 - 19	15 - 20
Activity	13 - 19	13 - 20
Emotionality	9 - 16	11 - 18

Item	How true is this of you? Hardly at all				A lot
1. I make friends easily	1	2	3	4	5
2. I tend to be shy.	1	2	3	4	5
3. I like to be with others	1	2	3	4	5
4. I like to be independent of people.	1	2	3	4	5
5. I usually prefer to do things alone.	1	2	3	4	5
6. I am always on the go	1	2	3	4	5
7. I like to be off and running as soon as I wake up in the morning	1	2	3	4	5
8. I like to keep busy all of the time	1	2	3	4	5
9. I am very energetic	1	2	3	4	5
10. I prefer quiet, inactive pastimes to more active ones.	1	2	3	4	5
11. I tend to cry easily	1	2	3	4	5
12. I am easily frightened	1	2	3	4	5
13. I tend to be somewhat emotional	1	2	3	4	5
14. I get upset easily	1	2	3	4	5
15. I tend to be easily irritated	1	2	3	4	5

Item	How true is this of your friend? Hardly at all				A lot
1. He/she makes friends easily	1	2	3	4	5
2. He/she tends to be shy.	1	2	3	4	5
3. He/she likes to be with others.	1	2	3	4	5
4. He/she likes to be independent of people. .	1	2	3	4	5
5. He/she usually prefers to do things alone .	1	2	3	4	5
6. He/she is always on the go.	1	2	3	4	5
7. He/she likes to be off and running as soon as he/she wakes up in the morning	1	2	3	4	5
8. He/she likes to keep busy all the time. . .	1	2	3	4	5
9. He/she is very energetic.	1	2	3	4	5
10. He/she prefers quiet, inactive pastimes to more active ones.	1	2	3	4	5
11. He/she tends to cry easily.	1	2	3	4	5
12. He/she is easily frightened	1	2	3	4	5
13. He/she tends to be somewhat emotional . . .	1	2	3	4	5
14. He/she gets upset easily.	1	2	3	4	5
15. He/she tends to be easily irritated	1	2	3	4	5

Item	How true is this of your friend? Hardly at all				A lot
1. He/she makes friends easily	1	2	3	4	5
2. He/she tends to be shy.	1	2	3	4	5
3. He/she likes to be with others.	1	2	3	4	5
4. He/she likes to be independent of people. .	1	2	3	4	5
5. He/she usually prefers to do things alone .	1	2	3	4	5
6. He/she is always on the go.	1	2	3	4	5
7. He/she likes to be off and running as soon as he/she wakes up in the morning	1	2	3	4	5
8. He/she likes to keep busy all the time. . .	1	2	3	4	5
9. He/she is very energetic.	1	2	3	4	5
10. He/she prefers quiet, inactive pastimes to more active ones.	1	2	3	4	5
11. He/she tends to cry easily.	1	2	3	4	5
12. He/she is easily frightened	1	2	3	4	5
13. He/she tends to be somewhat emotional . . .	1	2	3	4	5
14. He/she gets upset easily.	1	2	3	4	5
15. He/she tends to be easily irritated	1	2	3	4	5

Item	How true is this of your friend? Hardly at all				A lot
1. He/she makes friends easily	1	2	3	4	5
2. He/she tends to be shy.	1	2	3	4	5
3. He/she likes to be with others.	1	2	3	4	5
4. He/she likes to be independent of people. .	1	2	3	4	5
5. He/she usually prefers to do things alone .	1	2	3	4	5
6. He/she is always on the go.	1	2	3	4	5
7. He/she likes to be off and running as soon as he/she wakes up in the morning	1	2	3	4	5
8. He/she likes to keep busy all the time. . .	1	2	3	4	5
9. He/she is very energetic.	1	2	3	4	5
10. He/she prefers quiet, inactive pastimes to more active ones.	1	2	3	4	5
11. He/she tends to cry easily.	1	2	3	4	5
12. He/she is easily frightened	1	2	3	4	5
13. He/she tends to be somewhat emotional . . .	1	2	3	4	5
14. He/she gets upset easily.	1	2	3	4	5
15. He/she tends to be easily irritated	1	2	3	4	5

How Students Perceive Classroom Exercises in a Social Psychology Course

Karen O'Quin
SUNY College at Buffalo

Paper presented at the Eighth Annual Conference on Undergraduate Teaching of Psychology: Ideas and Innovations, Ellenville, NY, 1994

How Students Perceive Classroom Exercises in a Social Psychology Course

Karen O'Quin

There are several examples of in-class experiments and exercises for social psychology, both for general social psychology (e.g., Wann, 1993), and for experimental social psychology (e.g., Lutsky, 1993). The benefits of techniques that actively involve students in learning have been frequently discussed (e.g., Kixmiller, Wann, Grover, & Davis, 1988; Older, 1979).

In many cases (e.g., Benjamin, 1985; Lashley, 1987; Makosky, 1985) reports of student perceptions of classroom exercises are presented in anecdotal form. Some of the literature (e.g., Berrenberg, 1987) includes students' perceptions of an exercise, typically using descriptive statistics. However, there are relatively few studies which directly compare several classroom exercises used over the course of a semester (e.g., O'Quin, 1991). The purpose of the present study is to compare four short classroom exercises.

I used several classroom exercises in my social psychology class during Fall semester, 1993. The exercises that I chose have several characteristics in common. First, they are relatively short, taking from 5-20 minutes of class time rather than a full period. Second, they take place in the classroom rather than being take-home (I have had little success with the latter). Third, they require little data collection or analysis. Such exercises are common in social psychology (e.g., Schiavo,

1990), but in my experience, students seem to get bored quickly if an exercise involves much time with numbers. Fourth, these exercises require minimal preparation time on the part of the instructor. Finally, these exercises do not require the help of a teaching assistant.

Method

Subjects

Subjects were 47 students enrolled in a social psychology class during the Fall, 1993 semester. There were 9 males and 38 females. Their average age was 21.7 (range 18 to 28).

Materials

Four in-class exercises were used. The first was "Truth or Lie," illustrating social perception (adapted from Bolt, 1990). Six students were asked to volunteer to speak in front of the class. Half of them were randomly given secret instructions to tell the truth, and the other half were asked to lie. The volunteers described a life event, and class members were asked to determine whether they were lying or telling the truth. Complete instructions for this exercise may be found in Appendix A.

The second exercise was "Solving Anagrams," and illustrated the hindsight bias (Bolt, 1992). Class members were given handouts with four anagrams and their solutions, and were asked to estimate how long it would have taken them to solve the anagrams. Invariably, they grossly underestimated the time it would probably have taken them (based on data from other college students). Please see Appendix A for the handout and

instructions.

The third exercise was a helping scenario, adapted from Allen and Smith (1987), to illustrate the rewards and costs of helping. Students were asked to imagine that they would have an opportunity to help a mugging victim. They filled out a "cost-reward" work sheet, and calculated their own subjective likelihood of helping (see Appendix A).

The fourth exercise involved playing several trials of the Prisoner's Dilemma game (source unknown). Students were paired with a partner whom they did not know. Each member of the pair was given 2 3 X 5 cards marked "A" and "B." The outcome matrix was displayed on an overhead projector. Students responded simultaneously, independently of the partner. Instructions are included in Appendix A.

A 10-item questionnaire was used for evaluation of the exercises (see Appendix B). It included student ratings of amount of learning, contribution to understanding social psychology, willingness to recommend the experience to other students, etc.

Procedure

All exercises were presented as a part of regular classroom instruction. Students participated either individually or in dyads. Exercises varied in length from about 5 to about 20 minutes. Immediately following each exercise, students rated it using the 10-item scale.

Results and Discussion

Data reduction

Preliminary factor analyses (principal components, varimax rotation) of the 10 items for each of the 4 exercises showed that 2 factors were obtained for each exercise. However, the factors often did not contain the same items across the exercises. Four items consistently loaded on the same factor (useless-useful, amount of learning, extent exercise was a valuable educational tool, and whether students would recommend the exercise). Reliability analyses (coefficient alpha) were then performed for these four items for each exercise. The reliabilities were high, averaging .90 (range .87 to .92). Thus, these four items were averaged to form a subscale labelled general evaluation (items were recoded if necessary, so that a high score indicated a positive evaluation). The other 6 items were analyzed separately because subscales could not be formed which were reliable across all four exercises.

Comparisons across exercises

Repeated-measures analyses of variance were used to compare the four exercises. Unfortunately, only 25 complete cases were available for these ANOVAs. Means, standard deviations, *F* statistics, and results of the post hoc tests are presented in Table 1.

As may be seen in Table 1, students gave the highest overall evaluation to the "Solving Anagrams" exercise, closely followed by "Truth or Lie." The "Helping Scenario" was given significantly lower evaluations than either of these two, with

the "Prisoner's Dilemma" activity in between.

Ratings of clarity and understandability showed patterns of results which were similar to each other. "Solving Anagrams" and "Truth or Lie" were seen as more clear and understandable, whereas "Prisoner's Dilemma" and "Helping Scenario" were significantly less clear and understandable.

For ratings of fun, "Truth or Lie" was rated as significantly more fun than the others, and "Prisoner's Dilemma" was second. Both these exercises involved social interaction, which seemed to contribute to their higher ratings of fun. Laughter was common during each exercise. "Solving Anagrams" was nonsignificantly less fun than the "Prisoner's Dilemma," and the "Helping Scenario" was seen as the least fun of all.

There were no significant differences among the exercises in how interesting or worthwhile they were rated, or in how much of a contribution they made to understanding social psychology.

All in all, then, my students' two favorite exercises were "Solving Anagrams" and "Truth or Lie." The "Helping Scenario" was their least favorite. However, it is important to keep possible order effects in mind when comparing the exercises with each other. It is conceivable that some of the exercises would have been rated higher if they had been the only exercise used (and thus, the implicit comparison would have been with usual classroom activities such as lecture rather than with previous exercises). Of course, only one order of exercises was possible in a single class in one semester.

In a previous study comparing several classroom exercises

(O'Quin, 1991), my students expressed reservations about the amount of class time devoted to the activities. They seemed focused on grades, and did not see a clear connection between classroom activities and exam performance. The exercises in the present study were considerably shorter than in the previous study; the longest, "Truth or Lie," took only about 20 minutes. Anecdotally, students seemed more amenable to shorter activities. Alternatively, an instructor might make a more explicit connection between exercises and exams, perhaps including exam items about the activities.

References

Allen, B. P., & Smith, G. F. (1987). Instructor's manual to accompany Baron and Byrne Social Psychology: Understanding Human Interaction, 5th edition. Boston: Allyn and Bacon.

Benjamin, L. T., Jr. (1985). Defining aggression: An exercise for classroom discussion. Teaching of Psychology, 12, 40-42.

Berrenberg, J. L. (1987). A classroom exercise in impression formation. Teaching of Psychology, 14, 169-170.

Bolt, M. (1990). Instructor's manual to accompany Myers Social Psychology third edition. New York: McGraw-Hill.

Bolt, M. (1992). Instructor's resources to accompany Myers Psychology. New York: Worth.

Eagly, A. H., & Crowley, M. (1986). Gender and helping behavior: A meta-analytic review of the social psychological literature. Psychological Bulletin, 100, 283-308.

Kixmiller, J. S., Wann, D. L., Grover, C. A., & Davis, S. F. (1988). Effect of elaboration levels on content comprehension. Bulletin of the Psychonomic Society, 26, 32-33.

Lashley, R. L. (1987). Using students' perceptions of their instructor to illustrate principles of person perception. Teaching of Psychology, 14, 179-180.

Lutsky, N. (1993). A scheme and variations for studies of social influence in an experimental social psychology laboratory. Teaching of Psychology, 20, 105-107.

Makosky, V. P. (1985). Identifying major techniques of persuasion. Teaching of Psychology, 12, 42-43.

Older, J. (1979). Improving the introductory psychology course. Teaching of Psychology, 6, 75-77.

O'Quin, K. (1991). Student perceptions of short, in-class experiences for social psychology. Paper presented at the Fifth Annual Conference on Undergraduate Teaching of Psychology: Ideas and Innovations, Ellenville, NY.

Schiavo, S. (1990). Classroom exercises in social and group psychology. Paper presented at the Fourth Annual Conference on Undergraduate Teaching of Psychology: Ideas and Innovations, Springfield, MA.

Wann, D. L. (1993). Performing experiments in undergraduate social psychology classes. Teaching of Psychology, 20, 235-236.

Table 1

Comparisons Across Exercises

Dependent variables		Truth or Lie	Solving Anagrams	Helping Scenario	Prisoner's Dilemma	F Statistic
Evaluation subscale	M	4.97_{ab}	4.98_{a}	4.19_{c}	4.37_{bc}	3.89*
	SD	1.16	1.25	1.50	1.41	
Confusing-Clear	M	6.35_{a}	6.61_{a}	4.74_{b}	5.09_{b}	10.22***
	SD	1.27	.78	2.03	1.83	
Understandable-Mysterious °	M	6.04_{a}	6.00_{a}	5.21_{b}	4.67_{b}	3.67*
	SD	1.68	1.82	1.77	2.12	
Not fun-Fun	M	6.25_{a}	4.63_{bc}	4.08_{c}	5.04_{b}	24.23***
	SD	1.03	1.88	1.79	1.92	
Interesting-Boring °	M	5.00	4.79	4.50	4.96	n.s.
	SD	2.06	2.25	1.93	1.78	
Worthwhile-Worthless °	M	4.96	4.71	4.21	5.08	n.s.
	SD	1.88	2.11	1.87	1.59	
"...exercise contribute to your understanding of social psychology?"	M	4.26	4.48	4.09	4.09	n.s.
	SD	1.14	1.24	1.76	1.31	

Note. All Fs have 3 and 21 df. * $p < .05$. *** $p < .001$. Means in each row with the same subscript do not differ at the .05 level.
° Indicates that item was recoded so that a high score was positive.

TRUTH OR LIE?

c. Overconfident social judgments. Our judgments of people are similarly vulnerable to overconfidence. A recent experiment by James Milojkovic and Lee Ross (1981) can be adapted to create an entertaining and memorable demonstration of this point (in fact, such an effective demonstration that, rather than report the experiment in the text, it has been reserved for your class use).

Distribute Demonstration 4-3 to the entire class and explain that, as a partial replication of Milojkovic and Ross, you are going to test their ability to distinguish truths from lies. Further explain that you have put ten slips in a hat, five of which say "tell the truth," and five of which say "tell a lie." Solicit a volunteer for each of the ten topics, having each person draw one of these slips. Then invite each person to stand and tell his or her truth or lie, after which the remainder of the students are to guess whether it was a truth or a lie, and to indicate their confidence. When all the stories are told, have the volunteers reveal which statements were truthful and which were lies. Have the students then compute a) their percent correct out of ten, and b) their average confidence level. Finally, ask for a show of hands: "How many of you were more correct than confident?" (Few hands will rise.) "How many of you were more confident than correct?" (Most hands will rise.) You may further wish to compute the class average; Milojkovic and Ross report that their Stanford students were 52 percent correct and 73 percent confident, a result close to what we have obtained using the materials of Demonstration 4-4. Milojkovic and Ross also report that when people were 90 to 100 percent confident they were not more correct that when they were only 50 to 65 percent confident.

Bolt, M. (1990). Instructor's manual to accompany Myers Social Psychology Third Edition. New York: McGraw-Hill.

TRUTH OR LIE?

	GUESS: Did the speaker tell the truth or a lie?	I am _____% confident that my guess is correct
1. Something that happened to me during grade school	_____	_____
2. My favorite meal	_____	_____
3. My earliest memory	_____	_____
4. My favorite vacation trip	_____	_____
5. A surprising talent that I have	_____	_____
6. Something interesting about a member of my family	_____	_____

Adapted from Bolt (1990)

Bolt, M. (1990). Instructor's manual to accompany Myers Social Psychology Third Edition. New York: McGraw-Hill.

Solving Anagrams

Richard Goranson's experiment cited by Gordon Wood provides the basis for another quick yet dramatic illustration. Distribute Handout 1–6. Collect students' responses and between class periods find the mean estimate for each anagram. Report them to your students along with the actual solution times reported by Goranson: 158, 182, 224, and 173 seconds! (More simply, within a single class period, you can ask students to raise their hands if their estimates are lower than these actual solution times.) Knowing the outcome, the answer seems so obvious that we grossly underestimate it.

Wood, G. (1984). Research methodology: A decision-making perspective. In A. Rogers & C. Scheirer (Eds.), *The G. Stanley Hall lecture series, Vol. 4*. Washington, DC: American Psychological Association.

HANDOUT

Solving Anagrams

Many of you are at least somewhat familiar with the task of solving anagrams. Sets of scrambled letters must be rearranged to produce a real word. Examine each of the four anagrams shown below along with the appropriate solution word given in parentheses.

1 WREAT (WATER)
2 ETRYN (ENTRY)
3 OCHSA (CHAOS)
4 GRABE (BARGE)

Estimate how long it would have taken you to correctly solve each anagram *if* you had not been given the solution.

Anagram 1 ____ seconds
Anagram 2 ____ seconds
Anagram 3 ____ seconds
Anagram 4 ____ seconds

Source: Wood, G. (1984). Research methodology: A decision-making perspective. In A. Rogers & C. Scheirer (Eds.), *The G. Stanley Hall lecture series, Vol. 4*. Washington, DC: American Psychological Association.

Exercise
Rewards and Costs of Helping

TIME TO COMPLETE:	15-20 minutes	In class
AHEAD OF TIME:	Copy handouts	No data analysis

1. Distribute the "scenario" handout to class members. (2 minutes)

2. Ask students to make four ratings, each on a 5-point scale, as indicated on the handout. (5 minutes)

    a. Rewards to victim
    b. Rewards to self
    c. Costs to self
    d. Costs to victim

3. Students then calculate their likelihood of responding by first summing the rewards (a + b) to yield a TOTAL REWARD score. Second, they sum the costs (c + d) to yield a TOTAL COST score. Finally, they subtract TOTAL COSTS from TOTAL REWARDS to yield a final score, which represents the likelihood of staying to help until the ambulance arrives. The final scores can range from +8 to -8. (3 minutes)

4. Lead a class discussion about the potential rewards and costs for helping. Students may be surprised to find that their final scores are lower (or higher) than they would have initially thought. (5 minutes)

TEXTBOOK TIE-IN

This exercise focuses only on the costs and rewards of <u>helping</u> and ignores the costs and rewards of <u>not helping</u>. (I thought it would be too complex to include both in the context of this exercise, given the "algebra phobia" some of my students exhibit.) Nevertheless, the exercise provides a systematic consideration of a helping decision. Deciding to help in such a situation is not a simple matter.

Another issue which may arise in discussion is that of sex differences. There is evidence (e.g., Eagly & Crowley, 1986) that men are more helpful than women in emergency situations. One reason might be that the calculation of rewards and costs is different for men and women. For example, men may be more concerned about looking foolish in front of other people, and women may perceive fewer rewards to the self for "anti-role" behavior.

Finally another issue which may arise in the classroom concerns legal issues in emergency helping. Can you be sued if you try to help and your help turns out to be ineffective or harmful? Many states have <u>Good Samaritan laws</u> to protect citizens in such cases.

This exercise was adapted from Allen and Smith (1987).

IMAGINE THE FOLLOWING SCENARIO AS VIVIDLY AS YOU CAN:

You are on your way home on Friday evening about 9:00 p.m. when you witness an assault. A mugger has just stabbed a well-dressed middle-aged man in the side, grabbed the man's watch, and run away. You quickly call an ambulance from a nearby phone, but it will not arrive for 10 or 15 minutes. The victim is seriously hurt and needs help to stop the bleeding. He also needs comfort until the ambulance arrives.

PLEASE GO ON TO THE NEXT PAGE

IMAGINE THIS SCENARIO AS VIVIDLY AS YOU CAN:

You are on your way home on Friday evening about 9:00 p.m. when you witness an assault. A mugger has just stabbed a well-dressed middle-aged man in the side, grabbed the man's watch, and run away. You quickly call an ambulance from a nearby phone, but it will not arrive for 10 or 15 minutes. The victim is seriously hurt and needs help to stop the bleeding. He also needs comfort until the ambulance arrives.

HELPING EXERCISE

Calculate your <u>own</u> subjective likelihood of helping by assigning values from 1 to 5 to each of the two REWARD and two COST categories below.

1 Low **2** **3 Medium** **4** **5 High**

<u>REWARDS</u>

a._____ Rewards to victim: relief of fear
relief of pain
other _____

+

b._____ Rewards to self: increased self esteem
praise from bystanders
relief of anxiety
other _____
other _____

<u>Sum of these two categories (a + b)</u> =

_____ **TOTAL REWARDS**

<u>COSTS</u>

c._____ Costs to self: loss of time
fear of blood (AIDS)
fear of retaliation if assailant returns
fear of embarrassment
+ liability if help is botched
other _____

d._____ Costs to victim: embarrassment at needing help
pain upon being handled
fear that injuries may be worsened
other _____

<u>Sum of these two categories (c + d)</u> =

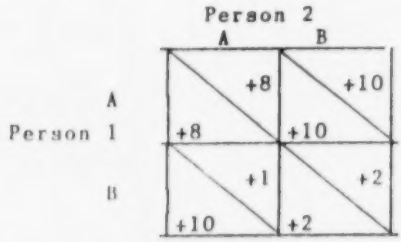
_____ **TOTAL COSTS**

TOTAL REWARDS - TOTAL COSTS = _____

(Likelihood of staying to help until the ambulance arrives)

Prisoner's Dilemma

An effective way to teach students about the prisoner's dilemma game is to have them play a few trials of the game in class. Each student in the class should be paired with a partner. One member of the pair should be arbitrarily assigned to be Person 1, the other Person 2. Each person should prepare two slips of paper, with one slip marked "A" and the other marked "B." These slips of paper will be used by the subjects to make their responses. The outcome matrix to be used in the game is as follows:

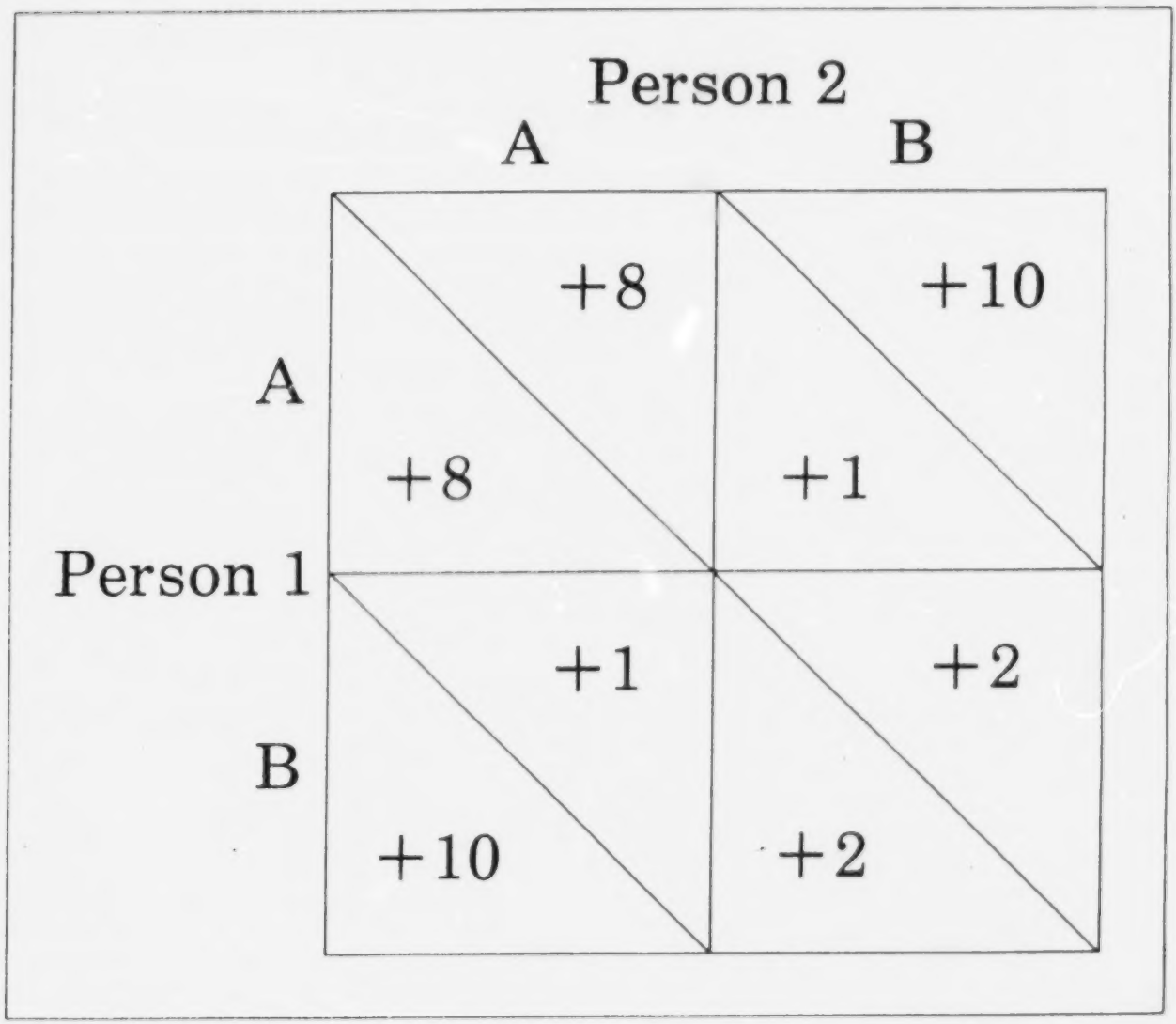


This matrix should be drawn on the board so as to be available to all the students. (A transparency can be made from the transparency master at the end of the manual if you are so inclined.)

First, have the students respond simultaneously. Each person decides which response he is going to make independently of the partner. At some signal from you, the students show their partners which choice they have made. In order to know what one's outcome is on a particular trial, a person must know both his own response and the response of the partner. For example, if both persons made response A, then both received 8 points. Likewise, if Person 1 chose B and Person 2 chose A, then Person 1 receives 10 points and Person 2 receives 1 point. Have the students play several trials of simultaneous responding. Secondly, have the students respond in alternation. One member shows his response to the partner before the partner responds. The game is quite different when one person knows the other's response first!

BEST COPY AVAILABLE

Outcome Matrix for Prisoner's Dilemma Game



Appendix B

BEFORE YOU BEGIN:

Please record the last four digits of your social security number in the identification number section of the computer answer sheet. This number will be used only for bookkeeping purposes. Your answers will be kept completely confidential and will be used only to evaluate the classroom exercise.

For the following concepts, please make ratings on each dimension according to how YOU feel about the exercise. For instance on the dimension

slow 1 2 3 4 5 6 7 quick

if you felt the exercise was slightly more slow than quick, you would mark a 3 on the answer sheet. If you felt the exercise was very quick, you would mark a 7, and so forth.

There are no right or wrong answers, only personal opinions, so please be as honest as possible.

Please rate the classroom exercise you have just completed on the following scales:

1.	not fun	1	2	3	4	5	6	7 fun
2.	interesting	1	2	3	4	5	6	7 boring
3.	useless	1	2	3	4	5	6	7 useful
4.	worthwhile	1	2	3	4	5	6	7 worthless
5.	confusing	1	2	3	4	5	6	7 clear
6.	understandable	1	2	3	4	5	6	7 mysterious

7. How much did you learn from this exercise?

nothing at all	just a little	some	a moderate amount	quite a bit	a great deal
1	2	3	4	5	6

8. To what extent was this exercise a valuable educational tool?

not at all	just a little	some	a moderate amount	quite a bit	a great deal
1	2	3	4	5	6

9. Would you recommend that other students use this exercise in this course?

definitely no 1 2 3 4 5 6 7 definitely yes

10. To what extent did this exercise contribute to your understanding of social psychology?

not at all	just a little	some	a moderate amount	quite a bit	a great deal
1	2	3	4	5	6